U. S. Department of Agriculta

MANUFACTURERS O. S. Department of A RECORD

A Weekly Newspaper Devoted to the Industrial, Financial, Railroad, Mining, Contracting, Engineering, Building, and General Business Interests of the South and Southwest

Vol. 60 No. 10

CK

ESTABLISHED 1882

\$4.00 Per Year Single Copy 15 Cents

12 YEARS' SOUTHERN COTTON CRU.

Year Ended				Bales	Value	Exports
August 31				Number	Including Seed	Value
1900 .				9,436,416	\$415,773,874	\$242,678,333
1901 .				10,383,422	571,567,585	315,879,294
1902 .				10,680,680	496,014,689	283,039,261
1903 .				10,727,559	560,770,282	306,398,639
1904 .				10,011,374	701,501,548	372,501,491
1905 .				13,565,885	719,195,359	399,898,721
1906 .				11,345,988	716,720,435	381,918,542
1907 .				13,510,982	797,352,000	470,006,654
1908 .				11,571,966	759,285,093	440,037,612
1909 .				13,825,457	775,794,494	417,678,436
1910 .				10,609,668	902,894,095	457,480,206
1911 .				12,120,095	1,030,133,527	567,000,000
Total				137,789,492	\$8,447,002,981	\$4,654,517,189

Alphabetical Index, Page 114. Classified Index Pages 108 to 113. Classified Opportunities, Pages 76 and 77.

THE MEASURE OF HEAT

The term British thermal unit (abbreviated B. t. u.), often confronts the user of coal.

As a yard stick is a measure of length, a B. t. u. is a measure of heat. The total amount of heat contained in a pound of fuel, all of which is liberated by complete combustion, is expressed in B. t. u's. A single heat unit is the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit at atmospheric temperature. Heat units make steam and steam makes power.

Below are tabulated, from some of the highest scientific authorities, the heat values of the commoner combustibles contained in coal:

SUBSTANCE B. t. u. Per Lb.

21,465 Acetylene Gas Marsh Gas . 21,345 62,035 Olefiant Gas Hydrogen Gas

Carbon 14,450

23,515 Included in the "Volatile Matter" of proximate analysis.

> "Fixed Carbon" of proximate analysis.

CLINCHFIELD COAL IS HIGH IN HEAT VALUE

Clinchfield coal is rich in Hydrogen and the Hydro-Carbon gases shown above. These "VOLATILE" gases burn above the fuel bed with rapidity and great intensity in close proximity to the boiler surfaces. Quick liberation of heat units means quick generation of steam; hence the economy in using Clinchfield coal which maintains boilers at high capacity easily and continuously, thus delivering more than the rated horse-power. Clinchfield coal ranges from 14,000 to 14,700 heat units per pound, because it contains small percentages of oxygen, moisture and ash, which are valueless, and large percentages of the combustibles highest in heat value.

OUTPUT OF MINES OF

2,000,000 Tons Per Annum, and Growing

CLINCHFIELD FUEL COMPANY

Selling Agent

SPARTANBURG, S. C.

Southern Terminal C., C. & O. Ry.

PERFORATED METALS FOR ALL USES

You will find our prices and goods "RIGHT" Send complete specifications. Erdle Perforating Co., Rochester, N.Y.





Our machines give greatest production with most economical tin and solder consumption.

Complete equipments for Open Top and Packers Cans for fruits, vegetables, fish, meats, soups, condensed milk, etc., also for paint cans, baking powder cans, lard pails, butter tins, tin boxes and packages—round, square, oval and oblong. Send samples, state requirements. See what we can do for you.

Illustration shows No. 15K Automatic Flanger for bodies.

Send for Can Machinery Cat. 14F.

E. W. BLISS CO.
4 ADAMS ST.,

Representatives for Chicago and Vicinity: Stiles-Morse
Co., 562 Washington Blvd., Chicago, Ill.

STANDARD" HE

Are Made Right, Weigh Right, and Are Sold at a Price that is Right. Will weigh from 1/4 ounce to 200 tons. If you need Good Scales write us for prices.

The Standard Scale and Supply Co. 243-245 Water Street, Pittsburgh, Pa.

SYRACUSE

Ash or Coal Barrows

Strong, well balanced, convenient; tubular steel frame; extra heavy steel wheel; legs provided with renewable steel shoes.

THREE SIZES
No. 52, 6 cubic feet; No. 54, 8 cubic feet;
No. 55, 10 cubic feet.

SYRACUSE CHILLEDPLOW CO. SYRACUSE, N. Y.

J. SPENCER TURNER CO.

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Manufacturers of
"Woodberry," "Mt. Vernon," "Ontario," "Aretas,"
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"Stark," "Bear," "Perfection," "Selkirk," "Hartford," "Prairie," "Ravens."

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Sheetings, Drills, Twills, Bunting, Grain Bags, Osnaburgs, Wick, Rope, Yarn, Sail and Seine Twine.

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NEW PLANT UP-TO-DATE NEW MACHINERY Rome Scale & Manufacturing Co. ROME, GA.

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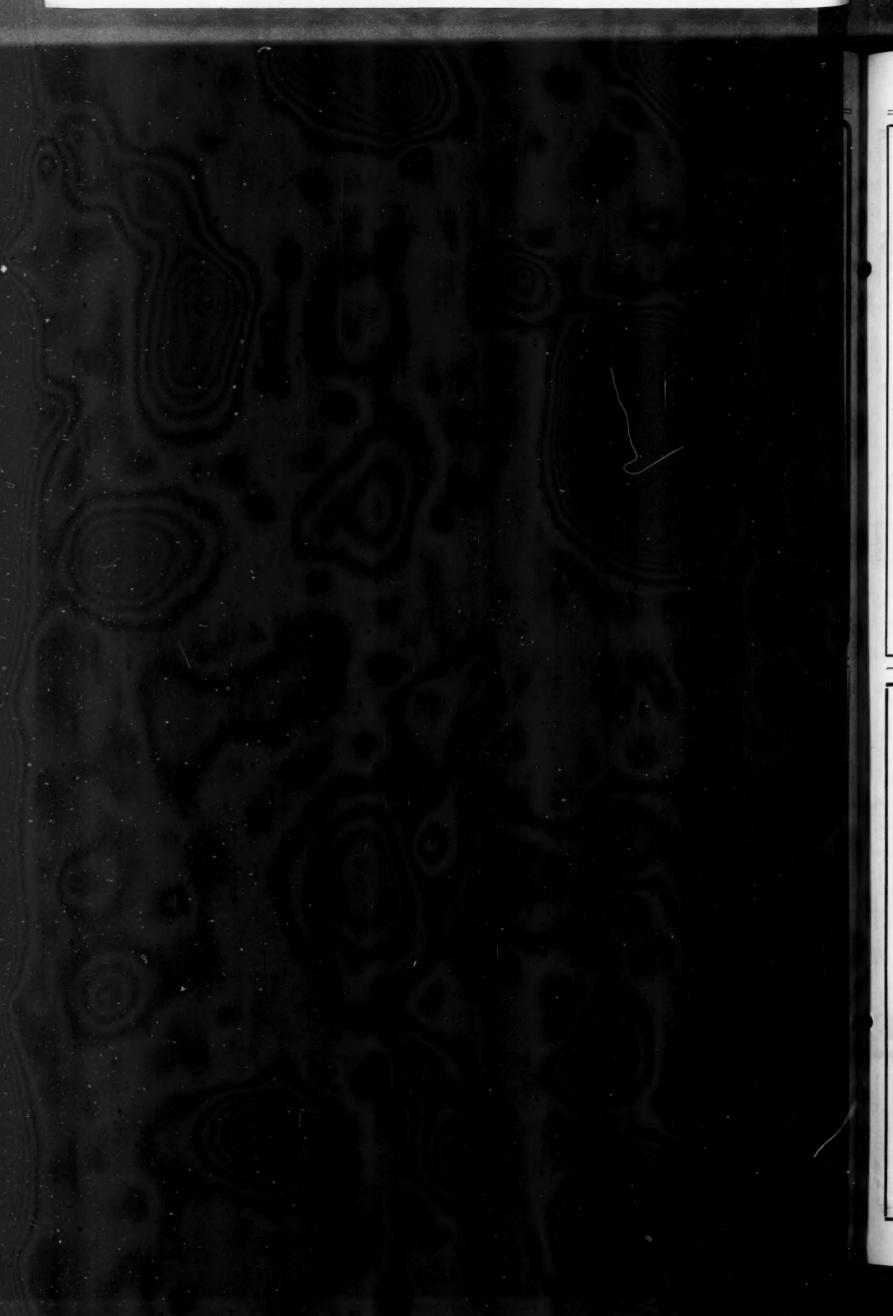
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OF SCALES FOR
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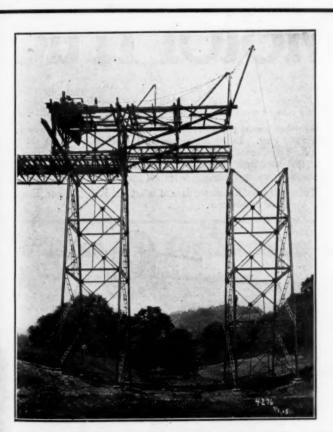
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PLATE AND STRUCTURAL WORK OF EVERY DESCRIPTION COMPLETE PLANTS

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All Specials

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Regular Type 25, 40, 60, 100, 150, 250 Watt. Meridian Type 40, 60 Watt. Flash Light, Miniature and Street Series. 200, 260 Volt-range; 45, 70, 110, 180 Watts.

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Devere Electric Co., Cincinnati
J. W. Ingram, Jacksonville, Fla.
Norton Hwd. Co., Norton, Va.

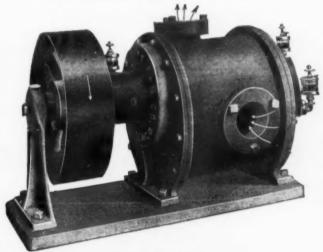
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Tenn.
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Garden City High Pressure Positive Blower

Gives the Highest Pressure or Vacuum Obtainable With a Rotary Blower



Patented March 12, 1907.

Noiseless in Operation. Has No Gears. Durability and Efficiency Unequaled. "Not as Good, But Better"

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1532 McCORMICK BUILDING

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Hauls material on its platform and on separate trucks as a trailing load.



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These trucks are time and labor savers.

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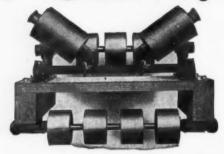
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NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church St.

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Twenty miles is about the outside limit of your hauling possibilities with horse teams. You can triple or even quadruple this radius—and reach out and get business never before within range, by using the

Kelly MotorTruck

Furthermore, the Kelly will do the work of three horse-drawn trucks (in some instances it is doing the work of six two-horse teams)—and at an operating cost of one two-horse team.

No other motor truck made today can show such a low average record for operating cost. In the big motor truck contests, in which the Kelly has beaten the best known trucks of America and Europe, the cost figures are merely the average figures which the Kelly shows in actual service in every business where hauling is required.

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Mill Gearing a Specialty

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Complete Steam Plants a Specialty

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For Immediate Shipment, Portable Boilers and Engines, which are built for heavy duty. If you are contemplating the purchase of new Boilers and Engines, it will pay you to write us.

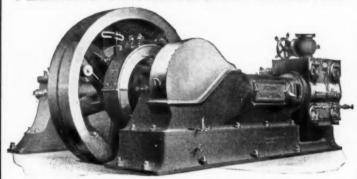
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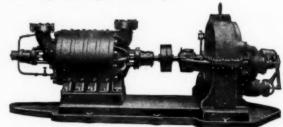
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Established 1840 ZANESVILLE, OHIO, U. S. A.

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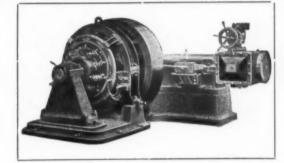


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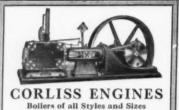
for high steam economy, high mechanical efficiency, reliability, long life, close regulation, sparkless commutation, economy in attention and repairs, and all round satisfaction.

A thorough acquaintance with our product will be of benefit to you in case you expect to be in the market at any time for power apparatus.

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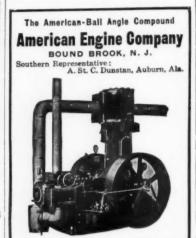


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TORCHES and OILERS

They are Guaranteed. Write
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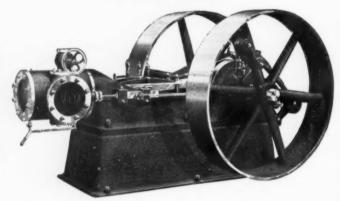
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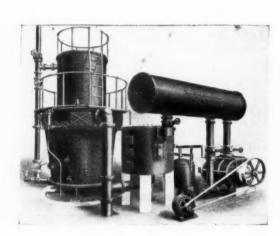
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In vicinities not reached by Central Stations, the cost of electric lighting has previously been prohibitive, due to the high cost of the necessary electrical ratus. The introduction of the low voltage Tungsten lamp has entirely revolutionized electric lighting.

apparatus. The introduction of the low voltage Tungsten lamp has entirely revolutionized electric lighting.

Small electric lighting plants consisting of a gas engine, dynamo, switchboard and storage battery can now be purchased for from \$350 and upwards. These plants are simple to install and operate and insure an absolutely reliable 24-hour service. The engine need only be operated occasionally to charge the battery, so that it can be utilized for doing other work.

The "Chloride Accumulator"

used with these plants is the same type of battery used by the large Central Stations in New York, Chicago, Philadelphia and nearly all of the large cities, as well as by the leading Electric Railways, Western Union and Postal Telegraph Companies, Bell Telephone Companies, etc.

If your home, factory or mill is not near a central lighting station, write today to our nearest office and secure a copy of our "Hand Book HL". It will give you complete information and prices.

THE ELECTRIC STORAGE BATTERY CO. PHILADELPHIA, PA. ATLANTA SALES OFFICE, CANDLER BUILDING 1911

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Possibly the cheapest and most reliable unit on the market. Sizes range from 50 to 500 lights.

These sets are very suitable for small factories, farms, steamboats, private residences, etc. Prompt shipments made. Write for prices.

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A Most Important Question Is How Can the Cost of Power Be Reduced The Answer, Install a Gas Power Plant and



Will Save two to three Tons of Coal per H. P. Hour Reliable Constant Guaranteed Write for deta BOGART

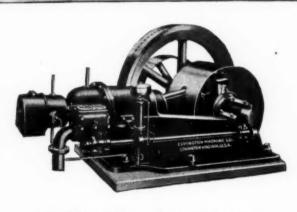
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He will tell you precisely how much power you are using and the actual cost per h.p. per hour. Each 100-h.p. of engine capacity may be furnishing an average of 50-h.p. at excessive cost.

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insure cheap power on light, fluctuating or full load. Fuel consumption ceases absolutely when the engines are shut down.

Tell us what is your maximum load, average load, and the number of hours per day. We will show you the cost of the same amount of power furnished under the same conditions by COVINGTON OIL ENGINES and you will see where thousands may be saved and added to profit account.

The cost of oil engine power may be known precisely in advance. The consumption of fuel oil for each 100-h.p. delivered is 13½ gallons per hour when the engines are operating on three-quarters to full load. With oil at 3c. per gallon, the fuel cost for 100-h.p. is 40c. per hour, \$4.00 per ten-hour day. The engines require little attention after starting and the attendance charge is small.

The correct design, substantial construction, slow speeds, low pressures and low temperatures insure dependable service for many years. Regulation meets the most critical requirements. Ask your Consulting Engineer. Covington Machine Company, Works: Covington, Virginia.

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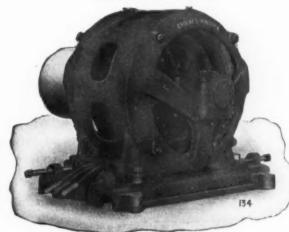
COVINCTON-OIL-ENCINES

CROCKER-WHEELER

"NO TROUBLE" MOTORS

All induction motors may be divided into two classes—those using the "open slot" construction and those built on the "closed slot" principle. The open slot construction has the advantage of mechanical convenience, while the closed slot construction has the advantage of electrical efficiency. When the slots are made open, it is much easier to replace damaged coils when for any reason repairs are necessary, but motors made on this principle usually have a lower power-factor and a lower efficiency. The Crocker-Wheeler Motors have a patented means of evercoming this defect, and by means of the magnetic slot bridge, they combine the advantages of both the open and closed slot construction without loss of any other desirable feature. We have a booklet which explains how this is accomplished and we will be glad to send you a copy on request.

Write for builetin 126.5.



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Incandescent Lamps

Unexcelled for Life, Brilliancy or Uniformity

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G. E. Intensified Arc Lamp

This lamp is particularly adapted to the lighting of interiors of large terminals, because it gives a brilliant, well-distributed white light. It is easily trimmed and the electrodes have a life of from 80 to 100

In railway terminals where the aesthetic taste is considered this lamp is especially suitable, as in addition to G. E. its excellent lighting

the cases are made in a variety of beautiful designs and finishes.

A notable example of an installation of this type is at South Station. Boston.

Write for Bulletin 4743A.

Multiple Luminous Arc Lamp

This lamp is used to good advantage for the illumination of large areas. It is patterned on the same principle as the Series Luminous Arc Lamp invented by the General Electric Company, of which more than 75,000 are at present in use.

The arc is formed between the upper electrode, consisting of a short copper bar, which is practically non-consuming, and a lower electrode, which contains a special composition. The cost of maintenance of this lamp is exceptionally low, as it is necessary to change only the inexpensive lower electrode at each trim of 200 to 225 hours when the lamp is burning at 4 Amperes.

Write for Bulletin 4741.

General Electric Company

Principal Office: Schenectady, N. Y.

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For Mill Yards, Factories, Schools, Railway Crossings, Etc.



Absolutely Watertight—Can be furnished for any voltage from 6 to 220—Sizes 8", 10", 12", 14" SEND FOR BULLETIN 15RI.

The Holtzer = Cabot Electric Company Brookline, Mass. and Chicago, Ill.

SEND YOUR INQUIRIES FOR **Electrical Equipment and Supplies**

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FOR ELECTRICITY OR GAS Write for Particulars.

Maryland Casualty Co. BALTIMORE

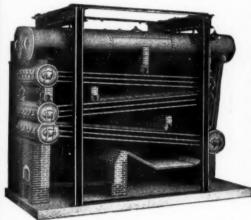
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A STEAM PRODUCER **VOGT** WATER TUBE BOILER



As a satisfactory, efficient steam producer, our water tube boiler stands out among the different makes of boilers throughout the country.

Complete combustion. Arrangement of tubes gvies the water very rapid circulation. Steam capacity

greatly enhanced by the hot gases outside the tubes.

Many other features of interest to the boiler users. Let us send catalogue.

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BUILDERS OF HIGH-GRADE BOILERS

Stand Pipes, Self-Supporting Stacks, Tanks, Towers, all kinds of Structural and Plate Iron Work, Boiler Fronts, Grate Bars, Kiln Wheels, all kinds of Castings made to order.

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The Improved ROOT WATER TUBE BOILER

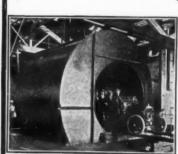
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Housing for one of two 10½-foot diameter "Sirocco" Fans for ventilating Baltimore & Potomac Tunnel of Pennsyl-vania R. R., Baltimore, Md.

Each fan is designed to handle 450,000 cubic feet of air per minute.

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SPECIAL PLATE AND TANK WORK
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Offices: No. 501 Traction Bldg., Cincinnati, Ohio; No. 719 Hennen Bldg., New Orleans, La.; Praetorian Bldg., Dallas, Texas; Main Offices and Works, Chattanooga, Tenn.

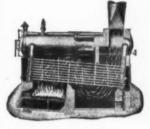
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For every service requiring high pressure steam

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Water Tube Steam Boilers

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MECHANICAL STOKERS

WORKS-BAYONNE, N. J.

BARBERTON, OHIO



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by the use of

Badger's Copper Expansion Joint

Will take care of the expansion in lines of steam pipe. Will absorb vibration between engine and piping.

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FOSTER SUPERHEATERS

¶ Will give increased efficiency and economical results in the operation of any plant using steam.
¶ Can be applied to boilers of any type, old or new.

Advantages

Greater efficiency in engines and turbines Increased duty of pumping engines Increased capacity of steam turbines No drips from joints or stuffing-boxes

Higher temperatures Greater volume Decreased Friction Saving in coal Better vacuum Smaller piping More heat units
Water troubles eliminated
Saving in steam
Perfect gas properties
Less steam to condense
Reduced load on boilers

Uses

Steam engines
Steam turbines
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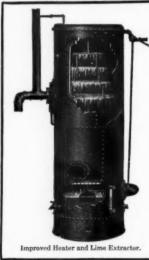
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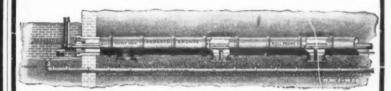
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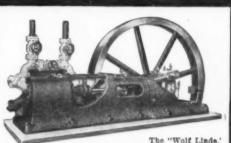
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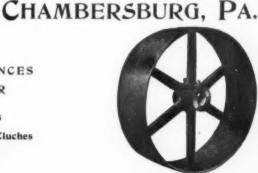
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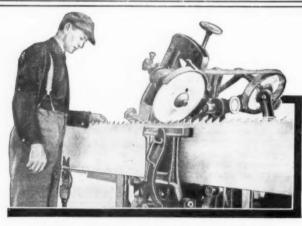
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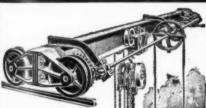
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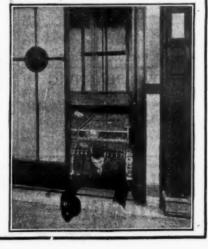
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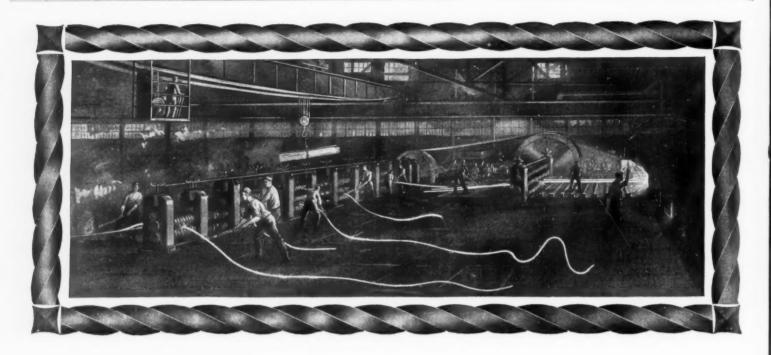
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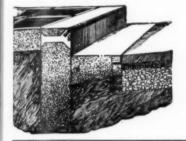
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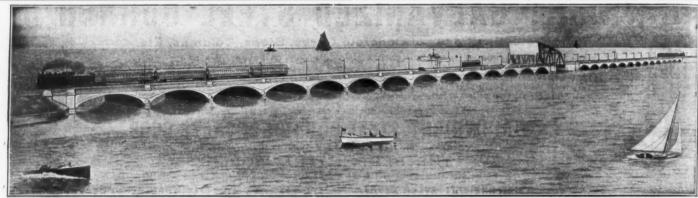
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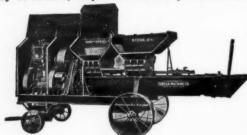
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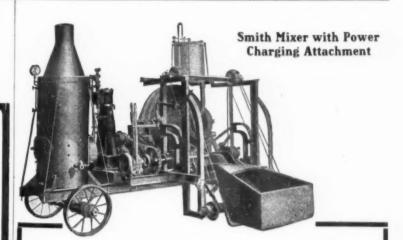
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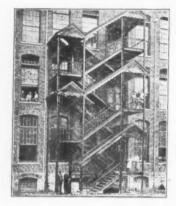
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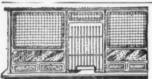
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Six miles from Atlanta

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When You Want Terra=Cotta Promptly

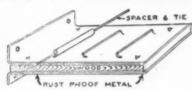
come to us. Our location gives us direct rail and water transportation to Southern points, and our large facilities enable us to ship promptly. We make ornamental terra-cotta for all architectural purposes. Largest plant in the South.

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HOLDS NAILS AND SCREWS TIGHT

ADVANTAGES:

It provides for perfect nailing or screwing in brick-work, concrete or tile.
It cannot be crushed.
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All Colors Prices Right

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Pressed Brick (all colors), Ornamental erra Cotta, Metal Lath, Corner Bead, Plas-er, Fireproof Windows and Doors, Tile, ron, Steel, Paint and material of all kinds. Write for Samples and Prices.

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For cleanliness and light use white enameled brick for all inside walls as well as for courts, Loht shafts, subways and basements. Enameled brick walls can be washed down with a hose and always kept sweet and clean.

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Let us bring a little common sense to bear on the subject of galvanized sheets. There are a number of manufacturers of galvanized sheets in this country—they can't all be making the best product.

We make galvanized sheets that are different from any others made on earth. They are made by the party at. Either they are better or worse than other sheets—they can't be the same.



The Normalian puts on a coating that will stand more punishment than any galvanizing heretofore known. The sheets will last as long as any made, and will work a whole lot better. If you are a manufucturer of Eave Trough, Conductor Pipe, Metal Shingles or any other article where double seaming is required, you cannot afford to overlook this coating that will stand more punishment than any coating is expected to stand.

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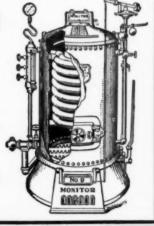
So wrote E. S. Hessler, merchant of Warnersville, Pa., after eight years' use of a Monitor Boiler No. 7.

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Send stamp today for "Economy Way"

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Wire Stapling Machinery
For Fruit Packages, Baskets, Crates,
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The oily nature of this natural asphalt keeps Genasco alive and strong to defend off; and this is why Genasco is lastingly waterproof.

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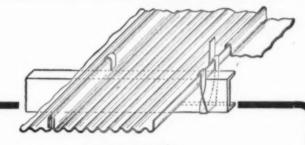
To the average man, paint is paint; the principles of its manufacture and application have never been explained to him.

Because of this lack of information, vast sums are annually expended for high-priced paints which are entirely unsuited for the purpose desired, to the profit of the dealer and manufacturer.

This especially applies to many so-called preservative and roof paints, which are supposed to ward off those elements which cause corrosion, rust and decay, viz., dampness, frost, rain, fumes, gases, etc. Scientific tests have shown conclusively that paints composed of vegetable oils and dry pigments are themselves gradually decomposed by these elements and soon fail to protect.

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Can be applied on iron purlins without nailing, riveting or puncturing the metal.

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Metal Ceilings, Metal Shingles, Metal Spanish Tile, Metal Culverts, Galvanized Cornice, Skylights, Ventilators, Ridging, Cresting, Etc.

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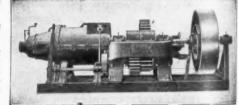
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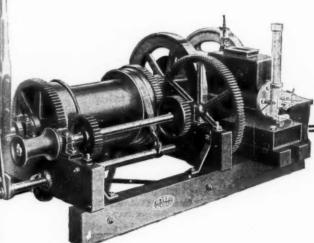
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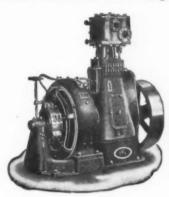
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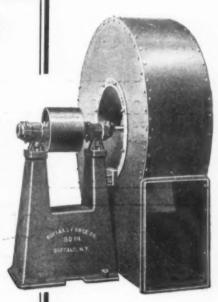
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Manufacturers Record

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U.S. Patent Office

VOL. I.X. No. 10.

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BALTIMORE, SEPTEMBER 14, 1911

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BALTIMORE, SEPTEMBER 14, 1911.

INCREASING CONSUMPTION OF COTTON BY SOUTHERN MILLS.

Southern cotton mills start the new season, 1911-12, in apparent prospect of making permanent the habit they have been acquiring of taking more of the American cotton crop annually than mills in the rest of the country. In the first eight days of the present season Southern mills took 40,037 bales of cotton, an increase of \$252 bales over the first week of the last season, while Northern mills took 22,382 bales, a decrease of 1724 bales. The record of the takings by Southern mills and Northern mills since 1890 is shown in the following table, which reflects the notable progress made by the Southern textile industry in that period:

		Takings			
Year		Southern	Northern		
ending	Crop.	mills.	mills.		
Aug. 31.	Bales.	Bales.	Bales.		
1890	7,311,392	546,894	1,799,258		
1891	8,652,597	604,661	2,027,362		
1892	9,035,379	686,080	2,190,766		
1893	6,700,365	743,848	1,687,286		
1894	7,549,817	718,515	1,601,173		
1895	9,901,251	862,838	2,083,839		
1896	7,157,346	904,701	1,600,271		
1897	8,757,964	1,042,671	1,804,680		
1898	11,199,994	1,231,841	2,211,740		
1890	11,274,840	1,339,339	2,190,095		
1900	9,436,416	1,597,112	2.068,300		
1901	10,383,422	1,620,931	1,967,570		
1902	10,680,680	1,937,971	2,050,774		
1903	10,727,559	2,000,729	1,967,635		
1904	10,011,374	1,919,252	2,026,967		
1905	13.5 5.885	2,163,505	2,282,145		
1906	11.345,988	2.374.225	2.349,478		
1907	13,510,982	2,439,108	2,526,390		
1908	11,571,966	2.193.277	1,896,661		
1900	13,825,457	2,559,873	2,680,118		
1910	10,609,668	2,341,303	1,993,904		
1911	12,120,095	2,363,616	1,993,576		

Between 1890 and 1911 American mills have come gradually to use a greater amount of American-grown cotton, but the large increase has been with the Southern mills. Of the crop of 7.311,392 bales in 1890, American mills took 2.346.152 bales, or 32.9 per cent., and of the American takings Southern mills took but 546,894 bales, or only 23.3 per cent. In 1911 of the 12,120,095 bales, American mills took 4,357,192 bales, or 35.9 per cent., and of the American takings Southern mills took 2,363,-616 bales, or 54.2 per cent. The greatest quantity taken in any one year by American mills was 5,239,991 bales in the season of 1908-09, when the record eron of 13.825.457 bales was marketed, and in the following season, when the 10,609,668-bale crop was the smallest that had been marketed since the season of 1903-04, the takings by American mills amounted to something more than 42 per cent. of the crop. The greatest amount taken by Southern mills in any year was 2,559,873 bales in the 1908-09 season, but the takings of the past season, as well as those of the preceding ones, were greater than the takings by all the mills of the country in 1890. The expansion in Southern-mill takings was comparatively moderate in the first five or six years of the decade 1890-1900, but they passed the million-bale mark in 1897, the million-and-a-halfmark in 1900 and the two-million-bale mark in 1903. In the 22 years since 1890 there have been 10 years-1893, 1894, 1896, 1899, 1900, 1901, 1903, 1908, 1910 and 1911-in which the takings by Northern mills have been less than those of the preceding year, and only four years-1894, 1904, 1908 and 1910in which the takings by Southern mills have been less than those of the preceding year. The takings by Northern mills in 1911 were only 194,318 bales more than the takings by such mills in 1890, while the 1911 Southern-mill takings were more than four times as great as their takings in 1890, and the increase, 1,816,722 bales, were 17,464 bales more than the Northern-mill takings of 1890 and only 176,854 bales less than the

AS VIEWED IN ENGLAND.

Northern-mill takings of 1911.

Marriott & Stewart, Limited, engineers, Twickenham, Middlesex, England, writing under date of September 1 in regard to the Manufacturers Rec-ORD, Say:

It is indeed a most complete and splendidly got-up publication, and we congratulate you most warmly for bringing out such an excellent paper, and we feel sure that the Southern States will benefit greatly by it. As regards the outlook for selling American goods in our country, it is very bright indeed. We had several prominent American manufacturies over here a little while ago, and had great pleasure in introducing them to several of our friends, with whom we hear they have now opened large accounts.

RAILROADS NCT MEASURING UP TO THEIR OPPORTUNITY IN SOUTHERN DEVELOPMENT.

J. A. Pride, general industrial agent Scaboard Air Line Railway, Norfolk, Va., writes to the Manufacturers Record:

It seems to me that we people in the South hardly realize the values at our doors and of a kind which in less favored sections are receiving such a tremendous exploitation. Canada invites the agriculturist to her idle lands, productive, no doubt, but allied with a severe climate for half the year.

I have just returned from a trip through a portion of the Carolinas lying in the "Loam Belt" between the foothills and the coast country. In Scotland county, around Laurinburg, Eimore and Sutherland, are lands which are cultivated first in cantaloupes, and as cultivation ends is sown in peas which ripen after cantaloupes are marketed, thus yielding two profitable annual crops. Cotton lands readily showing result of bale to bale and a half per acre can be seen in this section. I was shown a ten-acre plot which had given the wonderful yield of three bales of cotton per acre in a season. The cultivation was doubtless of the most intelligent kind, but the demonstration was worth the effort. An acre of corn by intensive methods had shown yield of 127 bushels. Further eastward toward the coast the strawberry plants set in late fall and early new year produce a yield around 100 crates per acre in few months. The berry is of best quality and sought for in the best markets. Around the developed farming sections are lands obtainable at reasonable figures and capable of the same development, and that, too, in a climate where outdoor pursuits are possible every day in the year.

The Manteactilets Record has done so much to record the South's agricultural advantages that I was moved to point out the instances coming under my immediate I have just returned from a trip through a portion of the Carolinas lying in the "Loam

advantages that I was moved to point out the instances coming under my immediate

Mr. Pride has briefly but graphically illustrated what is possible in every part of the South. What he reports as being done in that portion of the Carolinas lying between the foothills and the coast country is typical of what can be done in other portions of the South. Here is a land of infinite potentialities, not onetenth of which is realized by our own people or the people of the country, much less by the railroads operating in the South. It may, indeed, be said that most of the financial powers controlling the railroads of the South are densely ignorant of the possibilities of the country through which their roads run. As once expressed by a leading Eastern capitalist, "they are sleeping on billions of values"-values unutilized and undeveloped, as worthless to the world as if they were buried talents, because they are worthless until utilized.

Mr. Pride calls attention to how Canada, with no such possibilities as the South, is inviting settlers and investors. Canada is doing it, and doing it with marvelous success, because the railroads of Canada are awake to the situation. They have breadth of view sufficient to spend millions of dollars, knowing that tens of million of values will thereby be created.

When will the railroads of the South as a whole, and especially the controlling owners of Southern railroads, awake to the situation and recognize the beggarly way in which they are handling the South's opportunities as compared with what Canada and the Pacific Coast roads are doing?

As shown in the Manufacturers Record some months ago from the official figures of the Interstate Commerce Commission, leading Southern railroads in 1910 spent \$11 to \$12 and \$13 and \$15 and \$16 per mile per year in advertising the South, with a few running up to \$25 to \$30, while the Union Pacific, as typical of what California is doing, spent in the same year \$128 per mile. A few of the Southern roads are at work, some of them doing good work, though their expenditures are triflingly small as compared with what the Pacific Coast roads are doing, and yet there is more reason to advertise the South than to advertise the Pacific Coast and more profit to be made by advertising the South than is to be made by advertising the Pacific Coast. Contrast, for instance, the country tributary to the Southern Railway with the country tributary to the Union Pacific-two roads of approximately the same size-and the Southern Railway is leading the work in the South, although its rate per mile is very small as compared with the rate per mile expended in advertising by the Union Pacific. The great stretch of country tributary to the Southern road from Washington to the Mississippi River. running along the backbone of the South, reaching the mountain region on one side and the seacoast on the other, is unsurpassed on the face of the earth. Here is a region of marvelous possibilities—possibilities so great as almost to stagger our comprehension. Here is a region which can beat Oregon and Washington in profits on apple growing, a region where fruits of every variety can be produced, where grain, grasses and cotton yield far larger profits than do the chief crops of the West; a region of unequaled climatic advantages, ranging from the high, dry, cold atmosphere of the mountains of the Carolinas to the balmy softness of Florida's health-giving air. Here is a region of water-powers, of coal and iron. of phosphates, of granites, of marbles; a region of so many advantages as to make it useless to attempt to catalogue them unless we catalogue every advantage of every other country on the face of the earth. There are other regions of the South matching that section. There is the wonderful country from Baltimore through West Virginia, with resources great enough to enrich an empire, to which the Baltimore & Ohio Railroad is justly giving attention. There is the magnificent land tributary to the Clinchfield road; there are the great regions, rich in limitless opportunities, tributary to the Illinois Central, to the Georgia Central, to the Atlantic Coast Line and the Seaboard Air Line, to the Norfolk & Western and the Chesapeake & Ohio, to the Southern Pacific in Texas and Louisiana, to the Missouri Pacific and to other roads; but, with the exception of a few of these roads, which are doing something, little is being done to make known and fully utilize this treasure-house-a treasure-house so rich in resources that no human pen has ever yet adequately portrayed its possibilities.

Mr. Pride tells of a section where two crops a year can be produced, where a bale and a half of cotton per acre can be raised, where three bales of cotton per acre have been raised and 127 bushels of corn per acre produced. With such farming possibilities, with a climate where out-of-door pursuits are possible every day in the year, surely here is a region which, like most of the South, for these things could be duplicated all over the South, should be made known to the dwellers of the less favored regious of earth, but pitifully small is the amount of money which the railroads, by reason of the failure of their owners to understand the situation, are expending in turning these possibilities into real wealthcreating actualities.

Some Southern railroads do not advertise on the ground that they cannot afford to spend the money. That is a very narrow point of view. Pacific Coast railroads spend money freely in advertising for the express purpose of making money, and that this policy proves profitable is illustrated in the history of the Union Pacific and other roads. The passenger agents and industrial commissioners of most of the Southern roads are hampered in their operations by the limited amount of money appropriated for publicity. They are given what in reality is a beggarly sum and expected to produce great results, while the controlling owners of the roads have no broad conception of what can be accomplished or how to do it. If the energy and the well-directed management and money that are put by railroads into the development of the Pacific Coast were duplicated by Southern railroads, the results would be equally as great as on the Pacific Coast, perhaps even greater. But the owners of Southern railroads show by their action that they do not believe this.

There is scarcely an important daily paper in the East or North which does not constantly carry some big, enticing display advertisement of the Pacific Coast, and in the same dally paper there will sometimes be found, hid away in an obscure corner, difficult to be seen, a poor, little, petty, picayunish five or ten-line advertisement of the South by some Southern railroad, unwilling to authorize its industrial agent or passenger department to spend money with the broadness and the daring and the consummate ability of the California and Canadian roads. Everywhere men are seeking information about the South. This is illustrated in the letters which are constantly being received by the Manufacturers Record and by the business organizations in the South which have made themselves known. A few days ago a New York writer, whose nom de plume, "Holland," is often seen in a number of leading publications throughout the country, in a syndicate letter furnished to the Wall Street Journal and several Western papers, commented on some figures recently compiled by the Manufacturers Record about the growth of the South. This letter, like all other publications about the South, at once commenced to draw correspondence. One of the foremost bankers of Boston immediately wrote to the Manufacturers Record for further informa tion, and typical of the demand for information was a letter from a member of a lumber concern in Minneapolis, who wrote as follows:

A very interesting write-up by "Holland" in our Morning Tribune of today r A very interesting write-up of indiana in but always report compiled by you in regard to the growth of the South in recent years. May I ask for a copy of that compilation?

I am greatly interested in the South and have felt for some time that its growth and

would be more and more apparent in the coming twenty years; more so of the Canal. After a little visit last winter to Livingston, Ala., where I the opening of the Canal., After a little visit last winter to Livingston, purchased a little tract, we were delighted with the whole prospect. Minnesota are all right, but a little too much zero weather. Minneanolis and

That is illustrative of the feelings of tens of thousands of people throughout the North and West, and if the great financial interests in New York, such as , P. Morgan & Co., Blair & Co., Edwin Hawley, Harry Walters and others, who hold a dominating position in the control of Southern railroads, would really wake up to the situation, they would double the value of Southern railroad properties in less than one-half of the time that it will take to do so under premethods by a campaign of publicity matching that of the Pacific Coast and Canadian railroads.

FORTY THOUSAND EMPLOYE - | ing formed. In discussing this new era STOCKHOLDERS IN UNITED STATES STEEL CORPO-RATION.

Forty thousand employes of the United States Steel Corporation are stockholders in the company, the total number of stockholders in the company being about 100,000. The employes, from the highest officials to the day laborers, who have become stockholders in the company, appear to be working with enthusiastic interest for the highest development of this company and its various subsidiary enterprises. Few of them had anything to do with the organization of the company. They were not among the bankers or underwriters or others who brought the corporation into existence, but since its organization they have become buyers of its stock, believing in it and in its future. The fact that so large a number of employes are stockholders brings to mind the views expressed to the writer by Mr. Abram S. Hewitt about the time when the Steel Corporation and so many other great enterprises were be-

in corporation organization, Mr. Hewitt, while not by any means commending of the speculative operations which at that time were so rampant throughout the country, said that he looked upon these organizations as destined to be very helpful in settling the labor question in this country. He expressed the belief that through the organization of great industrial enterprises into stock companies, instead of being owned by individuals or close corporations as formerly, the opportunity would be given to the laboring people of the country to practically own and control the chief industrial interests of the land. He was firmly convinced that in this way the laboring people, instead of antagonizing employers strikes, would ultimately, through through the investment of their earnings in the stocks of these industrial enterprises, become their owners. Out

lationship which had often existed between the workmen and owners of such enterprise:

If Mr. Hewitt were living he would doubtless note with great interest the fact that 40,000 employes of the Steel Corporation are now numbered among the owners of that vast organization. It is the general impression that not only is the number of employes as stockholders steadily increasing, but that these employe-stockholders are gradually increasing their individual holdings.

The Carnegie Steel Co. was owned by about a dozen men, and absolutely dominsted by one man who owned a con-trolling interest in it. Its thousands of employes had absolutely nothing to say as to its management, nor had they any means of expressing dissatisfaction with its operation other than by a strike for higher wages or against a reduction of wages. The 40,000 stockholders among the employes of the Steel Corporation, on the other hand, can exert a very powerful influence in the management of the corporation, and oner or later they and other employes who join them will doubtless have a controlling voice in the corporation, even if not an actual control of the

WHY THE COST OF RAW COTTON HAS INCREASED.

Isaac A. Fulwood of Tifton, president of the Georgia-Florida Land & Investment Co., referring to an article in the MANUFACTURERS RECORD of August 31 on the disastrous effects of low-priced cotton, writes:

You certainly strike the keynote to the situation as to the growing of cotton. I am not posted on the manufacturing cost, etc., of cotton goods, but I do know something of the cost of growing and putting cotton the market. It costs more to grow cotton on the market. It costs more to grow cotton now than when we only got six to eight cents for it. Only a few years ago, when cotton sold only for six to ten cents, our lands rented for \$1.50 to \$2.50 per acre, and you could buy good cotton lands for \$2 to \$10 per acre. We had only a few rallroads, and cotton was the only crop we could get to

We could get all the labor we wanted to and gather this crop at \$6 to \$10 per month, and fertilizers were cheaper. could buy mules for \$75 to \$150 each. didn't know then that the people in the North wanted our melons, canteloupes and all kinds of vegetables in midwinter and early spring, because they could grow them only in summer. But things have changed, and the people in the South find that they can grow something besides cotton.

And now we have railroads going to every narket in the United States, and we can place our products on any of these markets in from 12 to 48 hours, fresh from our fields. We can grow more in money value of most any crop than cotton, for we now get \$3 to \$6 rent per acre for our lands, or sell it for \$25 to \$75 per acre.

We pay our labor \$15 to \$30 per month. We pay 10 to 20 per cent. more for fertilizers. We have to pay \$250 for mules, and we have got to have 15 cents for our cotton or other crops. An acre of land that will grow a bale of cotton will grow 200 bushels of white potatoes and 200 bushels of sweet potatoes the same year, worth \$400. Or it make 50 to 75 bushels of corn, 40 to 60 b els of oats and a ton of hay the same y Or it will make 300 to 590 bushels of on or any of the truck crops equally as well.

The manufacturer and consumers will soon learn that the South can grow any other crop cheaper and at a better profit than cotton. And we find that we can grow all of the grain and hay crops that the Western man can grow. We can raise our meat and We can raise our own horses and mules, our dairy and beef cattle, and we find play, when the people of the North and West are frozen up.

In his letter Mr. Fulwood upon a number of points which could he elaborated into quite a volume in exemplification of the fact, which many persons seem to overlook, that it costs much more to make a bale of cotton now than it did 10 years ago, that 10 years ago Southern cotton growers had only begun to receive fair prices for their staple, and that justice cannot expect the producers to continue to be satisfied with low prices for their goods when they are obliged to pay high prices for things which they purchase

Take lands, for instance. Between 1900 and 1910, with the area of all farm lands, improved and unimproved, in the South showing practically no increase, and with the area of improved lands increasing by 16,000,000 acres, or only 13 per cent., the value of all farm lands in the South increased from \$2. 388,593,000 to \$5,209,676,000, or 118 per cent., and the average acre value of all farm lands increased from \$6.88 to \$15.84, or 130 per cent. This increase price of land is due partly, of course to the increased prices received for products of the soil, including cotton, but the added cost of the land must be taken into consideration in efforts to arrive at a fair price for cotton. Again, while cotton is bringing much more per bale than it did 10 or 12 years ago, a bale of cotton hardly commands as much labor in making cotton as it did at the earlier period, and like disparity prevails as to other commodities. A comparison of wholesale prices in 1898 and 1908 made a few months ago by the Manufacturers RECORD showed that in the latter year. while the average value of a bale of cotton was 76 per cent, greater than in the former year, its purchasing power had not increased in like proportion.

Cotton growers have to live. They starved along for 10 years between 1890 and 1900, but in the past 10 years they have shared with the rest of the popu lation of the country the increased cost of living, while they have spent liber ally the difference between \$44 a bale, which they received for the cotton crop. including seed, in the season of 1899 1900, and the \$85 a bale for their crop of 1910-1911. Those expenditures are reflected in the mere doubling of the value of farm buildings in the South between 1900 and 1910, the actual increase having been about \$630,000,000 in the increase of 157 per cent. in the amount spent for fertilizers, and indirectly in the increase of more than 90 per cent. from \$5,469,544,000 to \$10,-483,922,000 in the assessed value of tax able property.

So much of the comfort and pros perity of the world is dependent upon the success of Southern cotton grow in making a crop to meet the world's demands that if any laborer is worthy of his hire that laborer is the cotton grower. It should not be necessary for cotton growers to contemplate organization to prevent depression of the price of their staple. Indeed, they have the means of prevention in their own hands, and in ever-increasing numbers they seem to be availing themselves of the means. The South can raise all its corn and meat and cattle and vegetables and fruits and have a surplus of them to sell to less fortunate sections; it can realize more per acre for its cotton than it is now receiving. Pursuit of such policy, tending to make cotton more and more of a surplus crop, must eventually give cotton growers control, not only of production, but of prices.

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FIG. 1.—THE BALTIMORE BARGAIN HOUSE MOTOR-TRUCK FLEET.

The Value of Motor Trucks. house entrances and railroad and steamer shipping platforms. Of course, a much shipping platforms. Of course, a much ing at warehouse and unloading at greater number of round trips is made per crowded railroad and steamship unloading

ILLUSTRATED BY THEIR WIDE USE IN BALTIMORE.

"The motor truck beats the horse in motor operators, no difficulty whatever is winter because it is not affected by icy or experienced from this source. The operthe Manufacturers Record. Other users of motor trucks in Baltimore feel, like Mr. Neilson, that they have a decided, well understood and appreciated advantage over horse-drawn vehicles through-

slippery pavements, and it beats the horse ators have already been trained and the in summer because it is not affected by the commercial interests have confidence in midsummer heat, which lessens the vitality that phase of their use and reliability. of the horse, destroys its efficiency for work and often kills it." Such is the ests desire assurance is the life of the mastatement made by Superintendent Neil-son of the Baltimore Bargain House to use is the source to which they look for information on that point, for actual results count for more than theories.

The accompanying illustrations are of

motor trucks in daily use in Baltimore and vicinity. There are at present about 50 out all seasons of the year.

As the automobile industry has far exceeded the expectations of its pioneers, so

firms in this city using motor trucks of over 15 different manufacturing companies. That this number will increase rap-

house entrances and railroad and steamer | space. This is an important item in loadday than could be made with horses. Also in winter, when the streets are covered with ice, the trucks experience no difficulty in travel when using skid irons over the solid rubber tires. This company experiences no difficulty in keeping the motor trucks in repair and ready for use as needed. John E. Hurst & Co., a big dry goods house, also uses Kelly motor miles per hour. trucks, as shown in Fig. 3.

concern doing a business of \$15,000,000 or more a year, dates from 1905, when an electric truck manufactured by the General Electric Vehicle Co., Long Island in Baltimore, and a large garage has been

platforms. This company uses both electric and gasoline trucks, each in the line of work for which it is most advantageous. The electrics are used where the traffic is carried on with frequent stops and at about 8 to 12 miles per hour, the gasoline truck being used for longer hauls, with fewer stops, and at speeds of 15 to 20

rucks, as shown in Fig. 3.

The Gas & Electric Co. of Baltimore
The use of electric and gasoline motor uses the General Electric Vehicle Co.'s trucks by the Baltimore Bargain House, a cars in its delivery service in Baltimore and vicinity, and is agent for the sale of City, N. Y., was purchased from the Gas erected by the Gas & Electric Co. exclu-& Electric Co. of this city, the Baltimore sively for electric vehicles. The company



FIG. 2.—SHARP & DOHME'S KELLY MOTOR TRUCK.

it may be predicted that the motor-truck | idly is evidenced by the large proportion industry, which is growing rapidly, will eventually far exceed even the expectations of those engaged in building it up now. As the introduction of this means of transportation has required that the nmercial interests be educated up to its advantages, the further and more rapid extension of the industry will be based on the experience gained from the commercial vehicles now in use.

Baltimore, with its streets of good, indifferent and in places exceedingly bad pavements, its suburban traffic over good roads and some not so good, and some vilely bad, its wholesale and retail delivery services, its ample supply of oils and electricity at reasonable prices, its variety of summer and winter climates, having the extremes of both, is a profitable and appropriate field for the study of the use of motor trucks as used by its merchants and other business men. Here every phase of roads and streets and every variety of climate between zero and 100 degrees are to be found.

The most important part in the education of the commercial interests in the use the operator, and as the long use of auto-

of these that have been purchased in the present year, and the satisfaction given in daily use. A number of the motor trucks now in use have been purchased with the view to determining the relative advantage of the motor trucks as compared with horse-drawn vehicles, in reliability at all seasons, in current expense, in depreciation and length of service. In interviews with the MANUFACTURERS RECORD the opinion has invariably been expressed by users in favor of the motor trucks, and in several instances repeat orders have already been given.

Sharp & Dohme, large manufacturers of druggists' specialties, purchased a Kelly (Frayer-Miller) motor truck in 1907, and have purchased two additional ones of three tons capacity, having found the first one a distinct advantage over the horse-drawn vehicles which it replaced. It is shown in Fig. 2. It has displaced two double teams, wagons and drivers, and covers much more territory in the same time, with all the other advantages of motor trucks. These trucks are de-scribed as very reliable by a member of of motor trucks is as to their reliability in operation and in wear. Their reliability in operation depends on the reliability of large season of the season trucks of particular advantage in handling the capacity, 7x17 feet body, will occupy, mobiles has produced thousands of reliable large loads in limited space about ware with the driver's seat, practically the same delivery wagon used is shown in Fig. 4.



FIG. 3.-JOHN E. HURST & CO.'S KELLY MOTOR TRUCK.

agent. This truck is shown in Fig. 1 at | states that this garage will provide the being constantly added to as the requirements of the expanding business demand increased transportation facilities. Su-perintendent Neilson of the company states that each motor truck used effects a saving of \$500 per annum over horse-drawn vehicles, and that electric and gasoline motor trucks are vastly more reliable. The company operates a three-ton Packard gasoline motor truck in addition to three fiveton, two three-and-one-half-ton and one two-ton electrics. He has found that a five-ton motor truck easily replaces two double-horse trucks and drivers, and that while a team can only work a limited number of hours per day, the length of time depending on the weather and road conditions, an electric motor can be relied on for 18 hours' work and a gasoline motor for practically the 24 hours of the day if necessary. His experience also shows that a five-ton truck can be more satisfactorily handled at the loading platform. taking twice the load and occupying practically the same space as a horse-drawn truck and team. The horse-drawn vehicle,

the end of the line of larger trucks since purchased by that house, which number is essential to successful and economical operation, and that such a garage is an important adjunct to the electric motor business of any city. In referring to the advantages of electric motor vehicles as compared with horse-drawn trucks the manager said that there is a distinct economy in the power vehicle, since it is so powerful that it can transport several tons where the horse team pulls one or two tons; horses eat, whether working or not; the power vehicle requires less space for housing, has a much longer life, which is a matter of the greatest importance in making the investment; is not so much interfered with by snow and ice and slippery streets; never gets sick, and will not run away. Also the electrics are free from noise, smoke and dirt and all the undesirable features of horse-drawn vehicles are eliminated.

The Gardiner Dairy Co. uses a three and-one-half-ton electric, two Packards and one "White" gasoline motor truck. The electric is used for quick delivery of ice cream, and has been found a great advantage for this purpose. The gasoline trucks are used for heavy hauling, transporting several tons of ice, feed, etc., for considerable distances daily. The electric

"Couple-Gear" gasoline motor truck manu- on the business for us."

The Arundel Sand & Gravel Co. uses a be used, and "the motor truck had to carry The long hauls factured by the Couple Gear Freight frequently necessary in delivering pianos Wheel Co., Grand Rapids, Mich. This have been found an all-day pull for teams, machine is unique in the arrangement of when the motor truck now makes the trip its motive power. The power is applied and is back by noon ready for another to each of the four wheels by an electric trip. Three pianos were recently deliv-



FIG. 4.-GARDINER DAIRY'S ELECTRIC DELIVERY.

namo, which is, in turn, driven by a gasofront and rear axles turn in opposite di- truck will find there a ready buyer,

motor supplied with current from a dy-ered at a distance of 14 miles, and the motor truck returned to the piano store line engine. This arrangement is found room in two hours and ten minutes, into produce a powerful pulling vehicle, and cluding the time necessary to unload. It is used in hauling four-ton loads of broken is needless to say that where such service stone, gravel, etc., in a dump wagon body. is found, any increase in demand for trans-The turning gear is so arranged that the portation facilities will mean that a motor

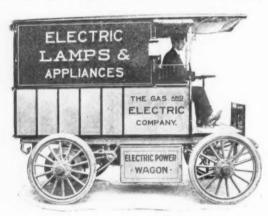


FIG. 5.-GAS & ELECTRIC CO.'S ELECTRIC DELIVERY.

rections in steering, so that the turning | effect is doubled. This truck is also made for operating with storage batteries, which eliminates the gasoline engine and dynamo. The United States Army has several "Couple-Gear" trucks in use, some of which are fitted with searchlights for maneuvering purposes

The Mar-Del Company is the Baltimore agent for the Packard motor trucks, of which over 30 are in use in Baltimore and vicinity. Some of those in use are shown in Figs. 6, 7 and 8. They are reported as having given general satisfaction wherever used, and as repair bills, garage expenses etc., have been in many cases systematic-The Stieff Piano Co. uses a "White" ally kept, the resulting economy of using

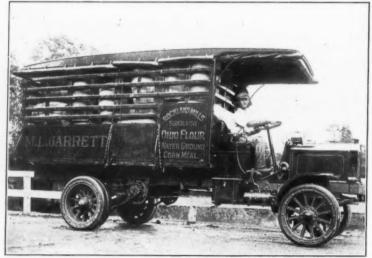


FIG. 6.-ROCKLAND MILLS' PACKARD MOTOR TRUCK

does the work of two double teams and drawn vehicles is clearly shown. The some more." It is a two-ton truck, avail-truck shown in Fig. 6, belonging to the been used during severe winter weather, the place of three four-horse teams and

gasoline motor truck, and finds that "it motor trucks as compared with hor able for transporting four pianos. It has Rockland Mills, Rockland, Md., has taken every week day from 60 to 85 miles, doing ards; Baltimore City Fire Depart. its work satisfactorily, economically and with reliability.

The Baltimore City Taxicab Co. has 15 motor truck express wagons in service for city and suburban delivery purposes. Truck bodies are fitted on the chassis of motor cars formerly in use as taxicabs. Forty new Franklin taxicabs have been purchased to replace these motor trucks Emerson Drug Co., 1 Saurer; the Baltiand other taxicabs that are being similarly converted.

ment, 2 Macks, 1 White; Hochschild, Kohn & Co., 2 Whites; Stewart & Co., 1 White; Lawrence Coal Co., 2 Packards; Bernheimer Bros., 1 Mack; Independent Ice Co., 1 Packard; Gomprecht & Benesch, 1 Gramm; Jordan Stabler Company, 1 Franklin; Edel Butter Co., 1 Stoddard. Dayton; Solomon Screen Co., 1 Buick; more American, 1 Grabowsky; Eitmiller Bros., 1 Grabowsky; J. L. B. Wilhide, The Benesch Furniture Co, has a four- 2 Kelly sightseeing cars; Frederichs Ice ton "Peerless" motor truck, which is used Cream Co., 1 Samson; Street & Corcoran,



FIG. 7.-A PACKARD TRUCK ON SLIPPERY PAVEMENT.

for making deliveries within a radius of 1 Packard; Baltimore Transfer Co. 1 25 miles of Baltimore, and makes special Packard; Harry J. Mohr, 1 Atterbury; J. trips to Washington, 40 miles distant, J. McNeill, 1 Atterbury; the Coca-Cola when necessary. This truck is one of the Co., 1 Autocar; Hutzler Bros., 2 Frankmain features emphasized in its claims lins; the George Brehm Company, 1 Packtomers, and is believed to exert a consid- ard; the American Label Co., 1 Packard. erable influence in that direction.

present in Baltimore, in addition to those This industry is in its infancy. It means already mentioned, are Kaufman Storage a revolution in transportation, the elimi-Quarry Co., 1 Packard; the Gas & Electric Co., 12 "Electrics;" the National development of traffic not now possible.

for good and prompt service to its cus- ard; Armstrong-Cator Company, 1 Pack-

There is no limit to the uses and future Among the firms using motor trucks at development of the motor-truck industry. Moving Co., 2 Packards: Schwind nation to a large extent of horse-drawn vehicles for hauling purposes, and a large



FIG. 8.-BURNSIDE FARM PACKARD MOTOR TRUCK.

Packard, 1 Mack, 1 Atterbury, 1 Gramm; G.-B.-S. Brewing Co., 1 Packard; 1 White: the American Tobacco Co., 1 Mack: Marsh Point Farm Co., 1 Packard; the Crane Company, 1 Alco; Merchants' Transfer Co., 1 Packard; Crown Cork & Seal Co., 1 Electric, 2 Grabowskys: the Schuster Bedding Co., 1 Samson; Fred cotton, the long hauls frequently necessary Bauernschmidt Brewing Co., 3 Packards; when the teams still employed could not trucks. The manager states that it runs the Monumental Brewing Co., 3 Pack- ing financial ability of the farmers to ob-

Building & Supply Co., 1 "White," 1 Letters received from companies and indi-Packard; Pikesville Dairy, 1 Packard; viduals in the South and Southwest are Baltimore Storage & Warehouse Co., 3 received by the Manufacturers Record Packards: J. F. Wiessner Brewing Co., 1 requesting information about motor trucks and to be put in communication with manufacturers and dealers in motor trucks. One writer in Kentucky wants a "freight line" with powerful motor trucks and trailers.

The building of good roads, the bulky nature of the farm products, particularly in reaching the railroad lines, the increas-

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tain and use the efficient power equip- throughout these sections as well as everyments necessary to carry on large farming where else. operations, etc., all combine to make this an important field in the development of motor-truck transportation. The farmers are already familiar with the use of gasorapid introduction of motor trucks truck.

That the manufacturers of motor trucks are preparing for the demand which they foresee is evidenced by the motor truck additions that are being made to many plants previously devoted to fine motors, repair facilities are increasing as the demand increases, motor trucks devoted to motor trucks exclusively. A are familiar sights in many of the cities great industry, far surpassing that of the and towns, and the training resulting from automobile in its economic importance to the use of automobiles will aid in the the country, is being created in the motor

Cotton Consumption in the South.

COL. HENRY G. HESTER'S CENSUS OF SOUTHERN MILLS FOR YEAR ENDING CLOSE OF AUGUST, 1911.*

tion is by no means an indication of more satisfactory conditions.

The same story prevailed of high prices for raw material and unsatisfactory returns for the manufactured article. In fact, many mills failed to make both ends meet, while still more have barely received a new dollar for an old one. The necessity for keeping the "help" together, and the fact that idle machinery is conducive to no good, if not positively detrimental, caused many to run for part of the time eaused many to run for part of the instead of closing down. Of course, it is instead of closing down. Of course, it is the presumed that every concern was the South, 1910-11. upprofitable, but it is safe to say that the general balance was the reverse of favor-

In all, 2.363,616 bales were consumed, against 2.341,303 last year and 2,559,873 the year before, an increase over last year of 22,313 and a decrease under the year before of 196,257.

Few mills have run full time, the stoppage of more or less machinery having Southern Spindles Consuming Forbeen general, varying from a few days to several months. This, with continued resort to finer numbers by the larger institutions, has made the average consumption per spindle very little different from last year, which was the smallest on record in the South. In addition to the spindles that re idle throughout the year, amounting to 417,752, against 216,518 last year, there were, of the active mills entirely shut down during August, in

	Mills.	Spindles,
Alabama	24	182,336
Georgia	21	246,956
Kentucky	-8	56,317
Mississippl	2	5,295
North Carolina	4.5	326,572
South Carolina	22	334,867
Tennessee	2	9.260
Texas	1	720
Virginia	4	76,068
Total	505.6	1 000 150

Last year the number of active mills which were closed during all of August was 157, with 1,332,651 spindles. The August consumption this year was 157,429 bales, against 145,483 last year, and 201,-487 the year before.

Referring to the details given in the tables annexed, I desire to emphasize the fact that they are not guesses or estimates. The list of mills in the South was made New and uncompleted added to list 9 up after many weeks of patient and careful investigation by correspondence in every State and by comparisons with the "Blue Book" and "Textile Mill Directory," just issued, which are standard mill directories, so that I have had the benefit of their investigation as well as my own experience of many years in locating the milla

*From his annual report as Secretary of 314,055 and a net gain of spindles at work the New Orleans Cotton Exchange.

Southern mills have done better this | Nearly all of the mills in the South ver than was expected, though the slight have reported to me direct, but few of the increase shown in their aggregate consump- 840 regular cotton mills, and these, of which I have obtained data sufficiently close to cover the purposes of an actual census, used but a small fraction of the total quantity consumed.

In addition, I have secured returns from every woolen mill, batting and mattress factory, and every knitting mill that has spindles and uses raw cotton. In fact, I have knocked at the doors of every institution of any kind in the South that uses raw cotton, and have invariably met with kind and prompt responses.

Mills. Alabama	Bales. 183 1,220 407 5,199 3,187	Last year. Bales. 893 2,934 100 5,546 4,696
Tennessee 3 Virginia 1	19	4,650
Total 51	10.225	14.169

Equal in bales of American weights to 12.041 this year and 14,686 last year.

eign Cotto	n.
	In operation
Alabama	
Georgia	24,156
Kentucky	156
Kentucky	631
North Carolina	37,984
South Carolina	34,307
	00.104

Total in operation 99,486 spindles, against last year 92,001.

Southern Cotton Spindles.

The record of spindles since 1860 is of

1860.	295,359
1870	338,870
1880	
1390	1,819,291
1895	3,177,310
1900	6.267,163
1901	
1902	
1903	
1904	
1905	
1906	
1907	10,598,035
1908	10,661,308
1909	11,255,787
1910	11,583,359
1911	11,897,414

Roster of Mills.

Total n	umber	r last	year.	d into	other	con-
cerns						

Total number cotton mills in the South.840

The record of spindles in the South

Total in operation Idle New, not completed	This year. 11,191,898 417.752 287,764	Last year. 11,006,459 216,518 360,382
Grand total	11,897,414	11,583,359
showing an increase idle and not complete		

	in operation.		New, not		
	Total.	Old.	New.	Idle.	completed.
Alabama	69	63	1		0.0
Arkansas	2	. 1		1	0.6
Georgia	157	144	0.0	12	1
Kentucky		7	0 0	1	**
Louisiana		.4	0.0	1.	* *
Mississippi		16	1.	6	4.6
Missouri	8	2	4.5	1	4.4
North Carolina		311	. 1	10	3
South Carolina	188	3,809		3	9
Tennessee	233	11	3.		1.5 %
Texas	21	11	2.0	51.	4.4
Oklahoma	1	**			**
Virginia	13	IL	* *		1
Wated	8610	707	4	50	+10
Total	636	770	5	27	26
Year before	841	778	9	23	21
A TIME OF BUT AND THE CONTRACT OF THE CONTRACT	12.57	6.650	40	1000	0.0

SOUTHERN COTTON MILLS IN 1910-1911. Mills.

*Including one mill for foreign cotion in operation.

Including mills commenced this year and those under this head last year not yet completed.

l	Alabama	Active. 17,050	Idle.	complete.	Total. 18,158
l	Arkansas	164	857	884	164 40,467
l	Kentucky	38,786 1,312	125	384	1,437
ĺ	Louisiaua	3,016	1,302 1,831		1,916 4,847
l	Missourl	722 57,041	236 869	G92	958 58,602
-	South Carolina Tennessee	100,749 4,083	390 228	4,432	105,571 4,311
l	TexasOklahoma	2,194	581	2	2,777
1	Virginia	11,155	****	300	11,455
	TotalLast yearYear before	236,886 238,845 219,563	7,227 8,613 4,557	6 \$50 7,590 10,851	250.603 245,048 234,971

Spindles,

		-In opera	ation.		New, not
Alabama. Arkansas. Georgia. Kentucky. Louisiana Mississippi. Missouri. North Carolina South Carolina Tennessee. Texas. Okahoma. Virginia.	13.808 2,006,630	*Old. 97.024 6.808 1.991.110 84.643 45.836 123.108 30.304 3.223.632 4.109.115 244.552 85.682 5.7712 383.828	New. 1,344 4,000 4,200 1,000	Idle, \$5,284 7,000 65,488 4,000 40,752 58,618 10,608 101,694 25,8°14 31,784 34,700 2,000	\$5,000 40,032 8,616 35,200 172,916 1,000 2,000 13,000
Total	\$11,897,414 11,583,359 11,255,787	11,181,354 10,984,335 10,509,733	10,544 22,124 42,040	417.752 216.518 192.720	287,764 360,382 511,294

*Including spindles added to old mills, less spindles thrown out during year, and new not complete mills of last year, which started operations this season.

Including spindles being added to old mills, as well as those in new concerns. IExclusive of 99.468 spindles using foreign cotton, say 2408 in Alabama, 24,156 in Georgia, 631 in Kentucky, 37,981 in North Carolina, 34,307 in South Carolina.

SOUTHERN CONSUMPTION OF AMERICAN COTTON.

				1321	108.
Alabama. *No Arkansas. Georgia. Kentucky. Louislana. Mississhppl. Missouri. North Carolina. South Carolina. Teunessec. Texas. Öklahoma. Vigjula.	0. mills. 64 1 144 7 4 16 2 311 189 18 11 11	†Looms, 17,050 164 38,786 1,312 614 8,016 722 57,041 100,749 4,083 2,194 	78pindles, 938,368 938,368 1,901,110 81,643 45,836 127,108 30,394 3,227,832 4,109,115 241,552 85,682 5,712 383,828	1911. 231,534 5 5 78 511,532 21,106 9,663 29,300 13,640 715,647 68,374 38,216 3,677 81,805	1910. 240.309 5.839 507.827 22.486 10.996 682.318 650.230 70.176 33.752 2.287 73.124
Totals			\$11,191,898 and included in	2,363,616 55,050	2,341,303 91,871
Net consumption to be added to crop)			2,308,566	2,249,432

*Mills in operation only. For total in South see other table.
†Employed in mills in operation. For total loows and spindles in South see other table
†Exclusive of one mill in operation using only foreign cotton in North Carolina.

(Spindles working American cotton only. For statement foreign see elsewhere.

CONSUMPTION OF SOUTHERN MILLS IN POUNDS.

The following shows the consumption of American cotton by Southern mills during the past two years in pounds of lint cotton and the average net weights per bale;

Alabama. Arkansas. Arkansas. Georgia. Kontucky. Louislana. Mississippi. Missouri North Carolina. South Carolina. Tennessee. Texas. Oklahoma. Virginia.	Pounds This year. 112.369,777 2.761.056 239.990.149 10.301.385 4.541.125 6.758.530 6.758.530 234.457.232 233.283.298 18.888.153 1.760,390 28.496,651	(Lint). Last year. 113.142.210 2.914.814 235.685.997 10.846.314 5.170.715 13.826.944 6.299.393 217.465.720 202.827.415 33.906.093 14.128.085 1.029.200 34.098.567	- Average This year, Per bule, 479.08 493.22 468.91 489.08 469.05 484.90 495.49 469.08 467.00 494.12 485.54 470.59	weights.* — Last year. Per lude. 470.82 499.20 466.04 482.24 470.24 477.24 477.27 465.26 465.40 471.62 418.59 470.02 474.52
Total	\$1.112.866.698	1 001 019 467	A71.05	100.97

REDUCING FURNACE STOCKS

Developments of the Week in Bir-mingham Iron Market.

[Special Cor. Manufacturers Record.] Birmingham, Ala., September 12.

Report is made of the sale of 2000 tons of gray forge iron for delivery during the remainder of the year at \$9.25 per ton Birmingham, but the demand for higher grades was very light during the past veek, and only scattering lots were sold. The schedule of \$10.50 per ton at Birmingham is being generally adhered to for No. 2 foundry, with deliveries covering ing manifested in deliveries after January

the remainder of the year, the exceptions being comparatively small lots of favorite brands that are offered at from 25 to 50 cents per ton advance over the \$10.50 basis. A lot of 300 tons of No. 2 foundry for delivery in 60 days was sold during the week at \$10.50 per ton, and 100 tons of that grade for shipment over the remainder of the year brought the same price. The inquiries pending at this time involve comparatively small lots only, which are not very attractive in the aggregate. There is very little interest be-

1 by any parties concerned. The producing interests anticipate a heavy buying movement for first quarter requirements, while the consumers are apparently disposed to follow a conservative course in making additional contracts at the prices ruling. As far as can be ascertained, the general condition of the foundry trade is fairly satisfactory. Shipments against contracts are in the majority of cases being made at the rate originally agreed upon, and as a result furnace stocks are being gradually reduced. The furnace stock reports for September 1, which have just been received, indicate a decrease of some 30,000 tons in the aggregate during the month of August, which is after taking into consideration the stock of basic iron. The production of this last grade was increased by the blowing in of two furnaces during the month of August, making a total of six furnaces operated on basic iron September 1. It is understood that a portion of the present output of basic is to be disposed of; however, the consumption at the Ensley steel mill is fairly close to normal at this time. The prices for foundry iron applicable to shipments over the remainder of the year are as follows per gross ton at Birmingham furnaces: No. 1 foundry and No. 1 soft, \$11: No. 2 foundry and No. 2 soft, \$10.50; No. 3 foundry, \$10; No. 4 foundry, \$9.50; gray forge, \$9.25; mottled,

In the cast-iron-pipe industry the transactions recorded during the past week were very similar to those of the week A shipment of 1100 tons of previous. water pipe, applying on a contract for San Diego, Cal., was forwarded from the Bessemer plant of the United States Cast Iron Pipe & Foundry Co. It is noted that this material was all assembled and loaded in 33 box ears, which were forwarded from the plant in two trains on the same date. The small lots forwarded by other plants during the week were fairly large in the aggregate, and an equal quantity in similar lots was booked for future shipment. It is now expected that an additional plant will be operated on this material within 30 to 60 days, but prices have not been affected by reason of the proposed increase. We continue to quote the market as below for small orders, but subject to shading for large municipal contracts for water pipe per net ton f. o. b. cars here: Class "B," 4 inch to 6 inch, 823: S inch to 12 inch. \$22: over 12 inch. average \$21, with \$1 per ton extra for Class "A" pipe.

The market for old material is in a very chaotic condition. The buying interests are principally interested in bargain lots, and the movement is very light as a re-The nominal figures per gross ton f. o. b. cars here are as follows

Old iron axles, standard, \$15.50 to \$16.

Old iron axles, small, \$12 to \$13.50. Old steel axles, light, \$13 to \$13.50.

Old steel axles, standard, \$14 to \$14.50.

Old iron rails, \$13 to \$14.

No. 1 railroad wrought, \$11.50 to \$12.

No. 2 railroad wrought, \$8 to \$8.50.

No. 1 country, \$7 to \$7.50.

No. 2 country, \$6.50 to \$7.

No. 1 machinery, \$8.50 to \$9.

No. 1 steel, \$9 to \$9.50.

Standard car wheels, \$11 to \$11.50.

Tram car wheels, \$8 to \$8.50.

Light cast and stove plate, \$7 to \$7.50. The coal market is steady, with the operators on the best steam well supplied with orders and working a good force of men. There is also a larger coke consumption, which has had an effect on the prices of coking coal. The best grades of foundry coke are in good demand, and shipments are being made against contracts regularly.

An operating company for the proposed \$300,000 sulphuric-acid plant to be located near Ensley, Ala., has not yet been organized, but the plans are well under way and definite announcement in this regard will be made at an early date. The head of the proposed company will no doubt be a local capitalist.

The Senn Hoe Co., of which Edward Senn is president, has purchased sever acres of land near Boyles, Ala., on the Louisville & Nashville Railroad, for the erection of a factory for the manufacture of the "Senn" hoe. This company expects to be ready for operation shortly after January 1, 1912, and to employ a force of 75 to 100 men. The capitalization will, after operations have commenced, be increased to \$150,000.

Papers of incorporation have been filed with the Probate Judge of Jefferson county for the Schirber Concrete Roof Tile Co., with an authorized capital stock of \$100,000, which will be fully paid in when operations are commenced. This company will manufacture various kinds of cement products and will have headquarters at Birmingham. W. A. Biles is president and Arthur B. Biles secretary and treasurer.

The Tennessee Distilling Co, has filed papers of incorporation and has made for mal application for a charter to do business in Jefferson county Alabama. This company has an authorized capital stock of \$10,000, with Julius Tugendrich, president.

LEASED 10,000 ACRES.

Big Transaction in South Kentucky Coal Lands Southeastern

[Special Cor. Manufacturers Record.]

Barboursville, Kv., September 11. The largest transaction in the Southstern Kentucky coal field since the lease of the Kentenia Corporation's lands by the Perin-Delano syndicate was completed Saturday, when Kenneth Meguire of Louisville and L. W. Farmer of Barboursville executed a lease on the entire holdings of T. J. Asher in Harlan county, comprising 10,000 acres. The tracts acquired have been known as T. J. Asher's Clover Fork lands. The boundary is made up of many small parcels of land granted to Mr. Asher, who is the largest individual landowner in Kentucky, probably, and the holdings comprise the largest boundary of coal land in Harlan county except that held by the Kentenia Corporation and the International Harvester Co. As soon as a railroad can be constructed to this property coal mining will commence on an extensive scale by an operating company composed of Messrs, Sneed and Farmer, the Sneed & Meguire Coal Co. of Louis ville and several associates. posed development of this Clover Fork territory by Louisville and Barboursville interests means that all three forks of Cumberland River, about which lie measures of coal acknowledged by experts to be equal to the best in quality and thickness, will soon be arteries for a large coal traffic coming out over the new Wasioto & Black Mountain Railroad. The route for a railroad out Clover Fork to the Asher lands has already been surveyed, and it is expected that construction work will begin within the next 60 days. It is planned to install several mining plants large capacity during the coming winter.

Another deal of the past week of more than local interest was the purchase by the Interstate Coal Co. of the holdings of the Tye Fork Coal Co, of this city in the Brush Creek field of Knox county. Interstate Coal Co. bought outright 800 acres for a price of \$47,000 and leased an equal amount at a royalty of 10 cents. paper-making should be demonstrated to crop of Florida will bring \$10,000,000.

The 1600 acres thus acquired lie along the be a thoroughly practical commercial newly-constructed Tye Fork Railroad, a four-mile feeder of the Cumberland Railroad in upper Knox county. The Interstate Coal Co., whose headquarters are at Johnson City, Tenn., has invested close to \$1,000,000 in developed and undeveloped properties in this section.

W. S. HUDSON

A GEORGIA VIEWPOINT.

Col. Robert J. Lowry Opposes Political Tariff Agitation.

[Special Cor. Manufacturers Record.]

Atlanta, Ga., September 8 One of the best-known students of the

industrial conditions in Georgia and the South is Col. Robert J. Lowry, president of the Lowry National Bank, one of the oldest banks in the South. Regarding present prospects he said in an interview for the MANUFACTURERS RECORD:

"Present indications for crops, both orn and cotton, were never better in the history of the State. The South is very much interested in the tariff duties, as she is now a manufacturing section, when heretofore she has been an agricultural one. The manufacturers of the East have grown rich on high protective tariff. Since we have become such a manufacturing enter it goes without saying that with otton manufactured right in the fields into fabries, with as good labor as can be had in any other section, we have an advantage over any other section of the country,

"These manufacturers now use n than 2,000,000 bales of cotton annually, and they need the protection that has heretofore been given the Eastern factories. The disposition of the late Congress, which I am glad has adjourned, has been a continual menace to the manufacturers, as lowering the tariff would doubt less work a great hardship not only on the factory owners, but the labor in this section of the country as well. If this is done to any extent it will result in one or two things, either in closing the factories or in their being run on such reduced terms that the owner or operative could hardly live. The business people of the country should take these questions in hand and help soive them from a business standpoint, eliminating politics in the

"I am glad that the corn and cotton crop in Georgia, from the present prospects, will be large, and larger, in fact, than it has been for some years past. Our farmers are turning their attention to the growing of corn and other grains, making cotton a surplus crop. The many small industries, together with the many small truck farms producing fruit and other farm products, have in the past and will contribute a great deal to the building up of the State. The cotton crop is two weeks earlier this year than it was last.

"I am glad to see a disposition among the planters to sell enough of their product to pay their outstanding debts, and then with the aid of the banks and other similar instituions to carry their surplus crops to a time when they can sell them at a satisfactory price."

ROY G. BOOKER.

Paper from Cotton Stalks.

W. H. Croll, Candler Building, Atlanta, Ga., is seeking capital with a view to making paper of cotton stalks. Mr. Croll undertook the organization of a company for this purpose several years ago, as re ported at the time in the MANUFACTUR-ERS RECORD, but his plans never materialized; therefore, no mill has yet been built to put to a practical test his scheme. Samples of paper made from cotton stalks are shown.

If the utilization of cotton stalks for

proposition, it would make valuable what is now without value; that is, some millions of tons of cotton stalks. The subject at least merits the most thorough investigation.

FOR AN IRON AND STEEL PLANT.

A \$15,000,000 Company Propos Chattanooga Capitalists.

L. S. Colyar and associates of Chattanooga are planning the organization of a corporation reported to have a capitalization of \$15,000,000 for the purpose of developing coal and iron properties and building an iron and steel plant. Definite plans have not as yet been determined and referring to the enterprise Mr. Colyar writes to the MANUFACTURERS RECORD as follows: "There is as yet nothing defigite about the steel plant. Myself and associates have acquired a large acreage of iron ore and coal near this city, and we are making an effort to secure the money for building a large iron and steel plant, with all accessories. As soon as the organiaztion takes definite shape I will be glad to furnish you a statement for publi-

Mr. Colyar is president of the Ron Furnace Co., with furnace at Rome, Ga. and mines at Lyerly, Ga.

To Manufacture Potash.

A large plant is to be established at Baltimore to manufacture potash from feldspar by a patented process. Those interested have just leased from the city 10 acres of land on the water front, and plans are now being made for the necessary buildings to be erected. This proposition is under the management of Harry E. Gilbert, 201 North Charles street, Baltin and associates, who have incorporated the Spar Chemical Co. with a capital stock of \$60,000. If the plans of this company are successful, this will prove one of the most important discoveries of interest to the fertilizer trade. The fertilizer industry of this country has been entirely dependent on Germany for its supply of potash, as no deposits have ever been found in America. The potash reclaimed has been tested by leading fertilizer chemists, well as fertilizer manufacturers, both of whom have stafed that the product is perfectly soluble and adaptable to fertilizer manufacturing.

Big Land Sale in Texas.

W. G. Rucker of Houston, Tex., advise the MANUFACTURERS RECORD that a sale has been made through his office of 43,000 acres of land in Brazoria county to Western and Eastern capitalists represented by II. S. Judson of Chicago, who is vicepresident of the syndicate. It is understood that the purchasers of the property are associated with large land companies. and that they will develop this Texas purchase for settlement. Improved roads will, it is said be built through the property to open it up for farming operations. It is reported that the price paid is about \$680,000.

Texas Irrigation.

It is proposed to establish, under a re cent Texas law, an irrigation district near Cotulla, Tex., the project looking to the reclamation of between 40,000 and 60,000 acres of land. Another project near Raymondville is to organize about 100,000 acres of land belonging to 546 different persons for irrigation, the water to be carried by canals a distance of 25 miles Noah Allen of Brownsville is interested in these projects.

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Cotton and Sugar Development in Santo Domingo.

(Special Cor. Manufacturers Record.)

New York, September 12.

The severe damage to the Sea Island plantations from the recent storm and the consequent great reduction in the Sea Island cotton output will undoubtedly result in greater interest and demand for long staple cotton from the West Indies.

Santo Domingo is making great stride in cotton development, and many foreigners are arriving in that country for the purpose of acquiring desirable lands on the North Coast suitable for long staple cotton cultivation There are a number of new plantations of considerable size in process of development, and next year's output will undoubtedly be many times this year's production, which already has shown large gains over last year. There has been coniderable planting around Santiago, in the Province of Santiago, and in many places on the North Coast and throughout the Province of Puerto Plata, especially to the west of Puerto Plata and in the valley of the Bajabonico River. A large corpora-tion, to be known as the Santo Domingo Planters Co., now being organized by Atwood Violett & Co., bankers, of New York. will soon begin the development of a large plantation at Blanco Bay, some 20 miles west of Puerto Plata. Blanco Bay is the hest sheltered harbor on the north coast, and the only one where lightering is unnecessary, and as the soil and climatic conditions here are particularly well suited to cotton cultivation, the large development at this port will be watched with interest and should prove very profitable.

As an indication of the increased production and profitable nature of the business, a new roller gin mill is being erected at Puerto Plata, and the capacity of the mill at Monte Christy has been doubled. Land values along the entire North Coast are increasing rapidly, notwithstanding which fact these lands may be considered cheap compared with similarly located lands in Puerto Rico and Cuba, though the lands of these islands cannot compare with those of Santo Domingo for fertility and productiveness.

Leading American capitalists are taking an active part in the development of Santo Domingo, and have organized two new banks with \$500,000 cash capital each, which have recently been established. This is a highly important development for the republic, and will greatly aid the agricultural and commercial development of the country. Samuel M. Jarvis of New York, who organized the National Bank of Cuba, is an enthusiastic believer in the great future of Santo Domingo, and is one of the organizers of the National Bank

of Santo Domingo.

While cotton is attracting great attention in Santo Domingo, and the facts justify this interest, there are highly profitable possibilities in sugar-cane. As a mat-ter of fact, there is probably no more promising field in the world today. Fortyfive tons of cane per acre is a common crop, and there are already many large and profitable plantations established, and only recently the owners of the Guanica Central, one of the largest sugar estates in Puerto Rico, have taken up the development of a large sugar estate in Santo Domingo. The exports of raw sugar from Santo Domingto last year were valued at \$5,590,000.

A press report from St. Louis says that the Streckfus Line will immediately begin a steamboat service between St. Louis and New Orleans, carrying both freight and ngers, and it is anticipated that considerable business will be done from the

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Rond and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Columbia, Mo.—Columbia special road district voted \$100,000 bond issue for road construction.

Etowah, Tenn. - City voted \$35,000 bond issue for grading streets and constructing sewer system.

McGregor, Tex.—McGregor justice precinct voted \$100,000 bond issue and be-

gun*road construction.
Pawhuska, Okla.—Big Hill township voted \$50,000 bond issue for road improvements

Tilden, Tex.-McMullen county voted \$35,000 bond issue for road improvements.

Bonds to Be Voted.

Bronson, Fla.-Levy county postponed election to vote on \$100,000 bond issue for oad construction.

Cordele, Ga.-City contemplates voting on \$100,000 bond issue, \$40,000 of which is for paving.

Houston Heights, Tex.-City will vote October 10 on \$180,000 bond issue for street paving.

Killeen, Tex .- City will vote September 16 on \$22,000 bond issue for street improvements.

Marietta, Okla,-Lane county will vote September 23 on \$75,000 bond issue for roads and bridges.

Moultrie, Ga. - Colquitt county will vote in November on \$200,000 bond issue for road construction.

Petersburg, Va. - City contemplates \$150,000 bond issue for street improvements and extension of water and sewer systems.

Pineville, Ky.--City will vote on \$15,000

bond issue for macadamizing streets.

Pineville, Ky.—City will vote in November on \$15,000 bond issue to complete

Wichita Falls, Tex.-Precinct No. 1, Wichita county, will vote October 13 on \$150,000 bond issue for macadam roads.

Contracts Awarded.

Aberdeen, Miss.-Monroe county awarded contracts to construct about 50 miles of road at cost of \$40,000 for grading and \$25,000 for concrete.

Asheville, N. C.—Buncombe county awarded contract to grade portions of road between Stocksville and Democra?.

Bennington, Okla.-City awarded contract to construct 3200 square feet of ce-

Bradentown, Fla. - Manatee county

warded contracts for road construction. Concord, N. C.-City awarded contract to construct 6000 yards cement sidewalks.

Denton, Md.—County awarded contract to complete state highway between Denton and Greensboro.
Fayetteville, W. Va.—City awarded

conditional contract at \$11,300 to con-struct about 13,000 linear feet of concrete or cement sidewalks, ranging from three to five feet wide.

Fayetteville, W. Va.—City awarded conditional contract to construct 13,173 linear feet of concrete or cement sidewalks, from three to five feet wide.

Follansbee, W. Va.—City awarded contract to pave streets.

Gadsden, Ala.-F. G. Lee, County Surveyor, is supervising construction of road to connect Big Mills Valley with Little Mills Valley.

Hot Springs, Ark.-City awarded con-

tract at \$29,214 for one mile creosote block paving.

Johnson City, Tenn.-City awarded contract at \$53,000 to construct 23,000 yards paving and at \$6000 for gutters.

Marlin, Tex.-City awarded contract for paving.

Paducah. Ky.-City awarded contract to construct concrete sidewalks, granite curbs and gutters.

San Antonio, Tex.—City awarded con-tract for 15,000 feet of cement sidewalk and curbing.

Tampa, Fla.—City awarded contract to

construct cement sidewalks.
Vicksburg, Miss.—City awarded contract to construct sidewalks on two streets.

Waco, Tex.—City has awarded contract to construct sidewalks and streets at a

Contracts to Be Awarded.

Alabama City, Ala,-City will grade and chert two avenues.

Anniston, Ala. — Calhoun county re ceives bids until October 4 to grade, drain and surface with chert or macadam about three miles of road, and until same date to grade, drain and macadamize six miles.

Bulow, Fla.-St. Johns county will grade and construct road on John Anderson boulevard.

Burlington, N. C.—City receives bids until September 28 to construct about 20,-000 square yards bituminous macadam. 50,000 square yards concrete sidewalks, 5000 linear feet combined concrete curb and gutter and 25,000 cubic yards grading.

Cedartown, Ga.-City receives bids until October 3 to construct 5000 feet of cement curb and gutter.

Elsberry, Mo. — Hurricane Township Gravel Roads Co. will construct about eight miles of gravel or crushed-rock road.

Farmersville, Tex. — City will soon award contract for concrete crossings, culverts and gutters.

Fort Worth, Tex.-City will construct 9720 square yards paving-bitulithic, vitrified brick, rock asphalt or asphaltic concrete.

Frostburg, Md.—City receives bids until September 28 for grading and paving about 2000 feet of street.
Galveston, Tex.—Galveston county will

receive bids until October 1 for surfacing and shelling roadway over earth part of causeway. Gretna, La.-Jefferson parish contem-

plates construction of 21 miles of shell

Hamliu, Tex. - City will macadamize ight blocks at cost of about \$80,000.

Huntington, W. Va.-City will receive bids until October 5 for paving several

streets and alleys with vitrified brick. Huntsville, Ala.—City receives bids until September 19 to construct 1000 feet of tarvia or macadam pavement.

Lagrange, Ga.—City will construct ce-ment and tile sidewalks.

Lutherville, Md.-Lutherville Improve ment Association will construct road and improve sidewalks.

Lynchburg, Va.—City will receive bids until September 16 to construct 2000 square yards of granolithic sidewalks.

Marshall, N. C .- Madison county contemplates road improvements.

Kashville, Tenn.—Executive committee,
George N. Welch, chairman, Monterey,
Tenn., will complete part of Tennessee
Central highway, about 31 miles.
Oneonta, Ala.—Blount county receives

bids until October 3 to grade, drain and surface with chert one mile of State road.

Oneonta, Ala.—Blount county will expend \$4000 for construction of portion of State highway.
Park, Tenn.—City will expend \$15,000

for approximately five miles of road im-

San Antonio, Tex.—City contemplates construction of 150,000 square yards of asphalt pavement during year.

Shepherd, Tex.—Precinct No. 2 of San Jacinto county will construct roads.

Tulsa, Okla,-Commissioners receive bids until September 19 to pave 33 streets and alleys,

Winston-Salem, N. C .- Forsyth county will improve six main roads,

APPALACHIAN GOOD ROADS.

Ronnoke Convention of the Southern

The third annual convention of the Southern Appalachian Good Roads Association will be held at Roanoke, Va., October 4-5, and large delegations are expected from the seven States, Virginia, North Carolina, South Carolina, Tennes see, Kentucky, Georgia and West Virginia, which are included in the membership of this Association.

The Governors of the seven States interested in the convention have been asked to make addresses, and will be invited to attend the convention as guests of the city of Roanoke. All of them will probably not be present, but all the Governors of these States are strong good-roads advocates and are ready in every way possible to further the good-roads cause throughout the Southern Appalachian region. Among the speakers will be Governors William Hodges Mann of Virginia, Augustus E. Willson of Kentucky, Ben W. Hooper of Tennessee and Cole L. Blease of South Carolina, Logan W. Page, director U. S. office of public roads; P. St. J. Wilson, State Highway Commissioner of Virginia; E. J. Watson, Commissioner of Agriculture of South Carolina; F. II. Hyatt, president South Carolina Good Roads Association; H. B. Varner, president North Carolina Good Roads Ass tion; Joseph F. Bosworth, president Keutucky Good Roads Association; Cyrus Kehr, president Knox County Good Roads and Park Association; T. J. Hale, president East Tennessee Good Roads Association; United States Senator F. M. Simmons of North Carolina, United States Senator Claude A. Swanson of Virginia, Dr. Joseph Hyde Pratt, State Geologist of North Carolina; S. W. McCallie, State Geologist of Georgia : Dr. Thomas L. Watson, State Geologist of Virginia; L. E. Johnson, president Norfolk & Western Railway; Gen. E. W. Nichols, superinendent Virginia Military Institute; Dr. D. H. Hill, president North Carolina College of Agriculture and Mechanic Arts: Mr. Y. P. Branch, Georgia School of Technology: Prof. Hale Houston, Clemson Agricultural College, S. C.; Prof. C. M. Strahan, University of Georgia, and Prof. M. H. Stacy, University of North Carolina.

Memphis-to-Bristol Highway.

Mr. George A. Gowan, who has been active in promoting the construction of a modern highway across Tennessee from memphis to Bristol, writes to the MANU-FACTURERS RECORD:

"The two days' co-operative plan of road construction as applied to the Mem-phis-to-Bristol highway has been postponed until surveys can be made. In the meantime, as a result of the agitation, many counties that were in competition for the route have passed bond issues and are proceeding to build roads. In other counties where the co-operative work will be applied county courts and private citizens have agreed to see to it that the work will be completed through their respective counties. The co-operative plan of two days' work on the roads will be put on some time between now and December,

RAILROADS

[A complete record of all new railroad uliding in the South will be found in the construction Department.]

NORFOLK & WESTERN.

ross Earnings Increased, But Ex-penses Offset the Gain in 1910-11.

In the fiscal year ended June 30 last the number of passengers carried by the Norfolk & Western Railway increased 235,646, or 4.8 per cent, as compared with the preceding year, and the total pas revenue increased \$259,356, or 6.6 per cent. The freight carried increased 415. 738 tons, and the total freight revenue used \$77,686. Coal shipments were 15,481,908 tons, an increase of 1,482,392 tons, or 10.6 per cent., and the lumber shipments were 1,551,839 tons, a decrease of 122,142 tons. During the year there were established along the lines of the road 29 lumber plants, 26 farm implements and farm products factories and 5 mineral and metal products, together with 5 coal-mining plants.

Operating revenues were \$35,557,522. an increase of \$493.652, but the large increase in operating expenses of \$1,911,520 bring the total operating expenses to \$22, 958,280, and the increase of \$201,035 in taxes reduced the operating income to \$11,279,242, or \$1,618,904 less than in the receding year, and the net incor \$7,740,379, or \$1,302,786 less than in the fiscal year 1910.

The balance for the year was \$5,143,270. From that sum are deducted \$148,000 of payments to the Pocahontas Coal Co., \$919,668 in diivdends, adjustments preferred, and \$3,499,138 in dividends, common, leaving \$576,464 to profit and loss.

These facts are taken from the annual report of President L. E. Johnson, who

"It will be noted that the gross carnings show a small increase, but the oper ating expenses evidence the results of continued increases in the cost of labor and material, and in expenditures to meet pub lic demands and legislative requirements, many items of which your company can-In this connection it will not control. also be noted that the tax payments for the past year show a substantial increase The Supreme Court of the United States has upheld the constitutionality of the tax n net profits of railroad companies under section 38 of the act of Congress approved August 5, 1909.

'From the commencement of its operations, October 1, 1896, to June 30, 1911, your company has expended for acquiring or constructing railroad lines, branches extensions, second track, sidings yards, equipment, grade revision and changes of line and other additions and improvements, and for advances to subsidiary companies for construction purposes, the sum of \$88,193,914, obtained as follows: From sales of capital obliga-\$62,254,457; from income, \$25, 939,457.

"Of the equipment trust certificates is sued under your company's trust agreements, \$2,000,000 were paid during the The total paid to June 30, 1911, is \$10,600,000, and \$7,900,000 were then outstanding and unmatured.

"These expenditures and trust agree ments have added to your company's road 420 miles of main line and branches, 335.42 miles of second track and 620.57 miles of sidings, and to its equipment 615 locomotives, 164 passenger cars, 26,260 freight cars and 897 maintenance of way cars."

Jena to Vidalia.

a route for its proposed extension from Jena to Vidalia, La., about 50 miles. Grading is reported let from Jena to Jonesville, about 18 miles, and material for steel bridges over Little and Black rivers is said to have been furnished by Union Bridge & Construction Co. of Kansas City, that over the first stream being 400 feet and the latter 800 feet long. It was recently announced that L. S. Stewart of Kansas City had the bridge contract.

MEMPHIS. DALLAS & GULF.

Grading at Several Points and Will Weld Two Lines Into Its System.

A. M. Van Auken, chief engineer of the Memphis, Dallas & Gulf Railroad, Nash-Ark., writes confirming the report that the company purchased the Cadda & Choctaw and the Hot Springs, Glenwood Western lines, and telling how they will be made part of the system.

The company is now operating from Ashdown to Murfreesboro, Ark., 41 miles: from Cooper to Roseboro Junction, 214 miles; from Glenwood to Loewenberg, 22 miles: from Stephens to Gravsonia 7 miles; from Daleville to Dalark, 11 miles, and from Dalark to Fairview, 6 miles The sections it is building are from Murfreesboro to Bear Creek Junction, 18 miles; from Roseboro Junction to Glenwood, 3 miles; from Loewenberg to Hot Springs, 13 miles; from Brown to a point one mile east of Shawmut, 12 miles: from a point two miles east of Stephens to Daleville, 21 miles, and from Dalark to Pine Bluff, 62 miles.

Mr. Van Auken says that as grading has been done between Loewenberg and Hot Springs or between Dalark and Pine Bluff, but forces are now grading between Murfreesboro and Bear Creek Junction and between Brown and Arkadelphia. Since January 1 last about 10 miles of track has been laid between Shawmut and McLeod. The latter is reidway between Shawmut and Arkadelphia. and is not the station on the Graysonia branch, which is to be abandoned.

Connections will be made with various railroads, including the Frisco, Kansas City Southern, St. Louis, Iron Mountain & Southern, Prescott & Northwestern, Rock Island, Freeo Valley and the St. Louis Southwestern. The Iron Mountain route is touched at several points and the Rock Island at two or thre

STARTED 245 INDUSTRIES.

Plants Established Along the Missouri, Kansas & Texas Railway

The Missouri, Kansas & Texas Railway reports that 245 new manufacturing plants were started on its system in the fiscal year ended June 30. They represent a capital investment of \$4,573,676, and give employment to 3136 persons. Their materialization is due largely to the intelligent and aggressive work of the system's industrial department, which devotes its time to the acceleration of industrial progress at every town and city along the line where there are possibilities of development.

New plants using products of the forest and the field were: Cotton gins, 5; corncob-pipe factory, 1: cedar-chest factory, 1; cottonseed products mills, 3; cotton compress, 1; cotton concentrating and re conditioning plant, 1; cottonseed-oil mills, 3: cucumber pickle salting station, 1: cedar post and supply house, 1; grain elevators and mills, 18; furniture factory and planing mill, 1; furniture warehouses, 2; hay and grain houses, 6; hay barns, 3; lumber yards, 13; seedhouses, 10; a total

lows: Asphalt mining plant, 1; ceal mines. 4: oil storage tanks, 46, and oil well supply houses, 4.

Plants allied with building and construction were: Building material and paving contractors' yards, 8; limekiln, 1; rock crusher, 1: stone, sand and cement yards, 4; structural-iron plant, 1; sheetmetal works, 1; sash and door factories, 3; a total of 19.

Other plants to the number of 146 were these: Box and crate plant, 1; cleaning powder and electric sweeping plant, 1: old-storage and produce plants, 5; elec tric-light and power plants, 3; electrical supply house, 1: foundries, 2: glass plants, 2; hide and produce houses, 4; ice plants, ice and beer houses, 14; implement manufacturing plants, 3; motor truck manufacturing company, 1; packinghouse, 1; soda fountain supply house, 1; silo plant, 1; shoe factory, 1; warehous and distributing stations, 45: wholesale houses, 9, and wagon material plants, 4.

OLIVER WILL COMPLETE IT.

Savannah, Augusta & Northern Road to See Early Resumption of Work

W. J. Oliver of Knoxville, Tenn, president of the Savannah, Augusta & Northern Railway, is quoted in reports published at Augusta, Ga., as saving that the line, which he built and which is now operated from Statesboro to Stevens Crossing, Ga., 39 miles, will be completed, and that construction will be resumed as soon as possible. J. G. White & Co. of New York have been engaged to make the surveys. Mr. Oliver was accompanied on a trip to Augusta and Statesboro by Frederick C. Stevens of New York and W. A. Seymour and T. A. Wright of Knoxville, the former being engineer for Mr. Oliver and the latter counsel. It is understood that Mr. Stevens will be concerned in financing the enterprise. He is reported saying that the line will be extended from Statesboro to Savannah by either a trackage arrangement with the Savannah & Statesboro Railroad, by a similar arrang ment with the Brinson Railway (which would require the building of a connection) or by the construction of its own line between the two points.

In addition to the line which it is operating, the Sayannah, Augusta & Northern has an extension graded north from Stevens Crossing to Louisville, Ga., and survey will be made from Louisville to Norwood, 40 miles, the latter being on the Georgia Railroad. The line to Louisville, however, may be changed so as to include Midville. From Norwood the survey is to be continued toward Knoxville, Tenn., and this may indicate that the road is designed to connect with the Knoxville, Sevierville & Eastern Railroad, which Mr. Oliver owns, and which plans extensions into North Carolina to meet the Greenville & Knoxville Railroad, which is building northwest from Greenville, S. C. It seems as if the plan would be to build up to Greenville and make the Greenville & Knoxville line a link in a through route from Knoxville to the seacoast. It is contemplated to reach either by direct line or by branches both Elberton and Athens, Ga.

CANADA TO THE GULF.

Edwin Hawley and Newman Erb Reported on a New Plan.

Newman Erb, chairman of the board of the Ann Arbor Railroad and president of the Tennessee, Alabama & Georgia Railroad, 42 Broadway, New York, is reported in dispatches from there as announcing plans for a new through route from Canada to the Gulf of Mexico upon which he and Edwin Hawley are working.

connection with the Canadian Northern and the Grand Trunk lines of Canada, and also to extend the Iowa Central Railway to St. Louis, this to be done after a lease of the Iowa Central by the Minneapoli-& St. Louis. Mr. Hawley is chairman of both roads. At St. Louis connection would be made with the Missouri, Kansas & Texas Railway, of which he is also hairman, and that road has a through line to the Gulf at Galveston.

A telegram from Boston alleges that the fulfilment of the project depends upon the passage of the reciprocity bill by the Canadian Parliament, although denial of this is published in New York.

A press dispatch from Oklahoma City says it is rumored there that the Missouri, Kansas & Texas Railway may be part of the Union Pacific system, and that connection will be built from there to Wichita Falls, Tex. As to this it has been known for some time that the Missouri. Kansas & Texas Railway was in terested in the extension of the Wichita Falls route into Oklahoma, but there has until now been no intimation that it would be absorbed by the Harriman lines. There would seem to be a possibility that the Wichita Falls route might be used by the latter for a shore line from Kansas and Nebraska points down to the Gulf, but it will be some time before the extensions are completed to such an extent that they could be used in such a manner.

Gould Southwestern.

S. G. McClellan, general manager of the Gould Southwestern Railway Co., Gould, Ark., writes that the line to be built will be 60 miles long and will connect Star City, Holly Spring, Gould and Pendleton. This will include 12,000 feet of bridges, all wooden excepting one 60-foot span across the Saline River. This may be a drawbridge and require a steel span. It is not yet decided when bids will be re ceived for construction and equipment. The route is through rolling country. Connections will be made at New Edinburgh with the Saline River Railway, at Fordyce with the Rock Island, the Cotton Belt and the Fordyce & Princeton railroads, at a point one mile north of Draughon with the Thornton & Alexandria Railway, and east of Holly Springs with the Freeo Valley Railway.

The other officers of the company are Samuel Newhouse of New York city, president: T. S. Estabrook of Chicago, president; S. G. McClellan of Gould, Ark., secretary and treasurer; E. C. Buchanan of Little Rock, chief engineer.

New Equipment, Rails, Etc.

The Wichita Falls Route, says a market report, has ordered 2 10-wheel locamotives from the Baldwin Works, Palladelphia

The Baltimore & Ohio is reported in the market for 20 postal and baggage cars.

The Raleigh & Southport Railroad is eported to have ordered a consolidation locomotive from Baldwin's.

It is reported that the Western Maryland and the Missouri Pacific will not place their large contracts for cars until some time next month. The former, it is said, will get 5000 cars and the latter 4400. The Western Maryland is also expected to buy about 50 engines.

The Elkin & Allegany Railroad, Elkin, N. C., is reported to have ordered a cen solidation locomotive from the Baldwin Works.

The Carolina Traction Co., Rock Hill. S. C., says a dispatch, has ordered 2 Edison storage battery cars and 2 trail cars.

A table published showing the rail or ders placed with the United States Steel Corporation since March last reports The Louisiana & Arkansas Railway is reported to have surveyed and staked out ness, 55 plants were established as fol-

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given in tons as follows: Western Maryhorn, 5350; New Orleans Railway & Light, 500; Richmond, Fredericksburg & Potomac, 1000; Seaboard, 15,000; Rock Island (partly in the South), 10,000; Florida East Coast, 14,000; Baltimore & Ohio. 28,050; Chesapeake & Ohio, 6500; Illinois Central (partly in the South), 9400: Texas & Pacific, 5800; total, 179,-400 tons; total for the country, 396,573

The Kansas City Terminal Co. is re ported to have ordered 2200 tons of structural steel from the American Bridge Co. of New York for grade work in connection with the new union depot.

The Frisco, it is reported, will soon or der about 2500 refrigerator cars. It has already ordered 250 flat cars from the American Car & Foundry Co., St. Louis.

The Kentucky Terminal & Transfer Ca., Lexington, Ky., is reported to have ordered 310 tons of structural steel from the Pittsburg Bridge & Structural Co. for

Camden to Malvern.

The line which the Rock Island system will build in Arkansas, and which, it was recently reported, the Moline Lumber Co. would construct, is to be from Kent, which is near Camden, northward to Malvern, shout 55 miles, and bids for the construction are being asked until September 15. but the work must be completed in one year from that date. A detailed statement of the proposition says that there will be 1,392,200 cubic yards of common excava tion, 197,000 of loose rock, 15,000 of solid rock, 2.177,000 of pay haul, with 700 feet extreme free haul limit, Considerable pine timber will be required for trestles and bridges, beside cast and wrought iron, east-iron pipe and reinforced concrete pipe. The work will be let by J. B. Berry, chief engineer of the company at Chicago.

Vernon to El Paso, Tex.

A dispatch from Vernon, Tex., says that the San Diego, El Paso & St. Louis Railroad Co., which recently awarded a centract for the construction of 25 miles between Hope and Artesia, N. M., contemplates building across the panhandle of Texas, and has taken preliminary steps looking toward that accomplishment. The plan will require the building of about 250 miles of new line. Plans are also pending to build from Artesia to El Paso, about 150 miles, and this would make altogether a through route from Vernon to El Paso, about 525 miles. Connection would be made at Vernon with the Frisco system and the Fort Worth & Denver City Railway. A. Courchesne of El Paso is president of the company, and P. A. Mac-Carthy of Houston, Tex., is chief engineer.

Going to Lake Okeechobee.

The Florida East Coast Railway, acording to a report quoting an officer, has about 40 miles of grade completed and track laid on about nine miles of its extension from Maytown to Lake Okeechobee, which will be 130 miles long, and which will have a branch from Whittier to Basseuger, 30 miles. The Kissimmee Valley Construction Co. is the contractor, and about 9000 cubic yards of earth have to be handled per mile. The maximum grade is 4 of 1 per cent. and the maximum curvature 4 degrees. The bridging will include a bascule bridge 54 feet long and two long trestles, one of 900 feet over Econlockhatchee Creek and another of 1500 feet over St. Johns River.

Virginia Railway & Power.

The financial statement of the Virginia Railway & Power Co., which now includes \$103,000.

the earnings of the Norfolk & Portsmouth land, 10,600; Harriman Lines (partly in Traction Co., recently absorbed, shows for the South), 73,200; Sandy Valley & Elkrevenues of \$4,335,206, increase \$356,758; operating expenses \$2,340,676, increase \$207,457; net revenues \$1,994,530, increase \$149,301; total income \$2,040,826, increase \$162,436; surplus after payment of interest, taxes, etc., \$643,883.

The figures for each company separately are premilinary, and may be slightly changed after revision. They are: Virginia Railway & Power Co. gross reve nues, \$2,244,589; operating expenses, \$1. 129,271; net revenues, \$1,115,318; total income, \$1,161,614; surplus, \$508,250. Norfolk & Portsmouth Traction Co., gross revenues, \$2,090.617; operating expenses. \$1,212,405; net revenues, \$879,212, which was the total income; surplus, \$135,633.

Long Projected Line May Be Built.

According to a report from Mobile, Col. N. G. Winn of Demopolis, Ala., has closed negotiations with English capitalists to finance the proposed Mobile & West Alabama Railroad Co., which is to build a line from Mobile to Florence, Ala., via Demopolis and the mineral fields in the Tuscaloosa region, about 275 miles. The company was started several years ago but after surveys it became inactive, and until recently little was announced concerning its plans. II. Austill of Mobile who, with others, recently organized the Mobile & West Shore Traction Co., is president of the Mobile & West Alabama, and N. A. Day of Montgomery is vice president.

Railroad Notes.

A report from Algiers, La., says that Joseph E. Renecky and associates propose to build an electric railway on Morgan and Patterson streets,

The Kansas City, Mexico & Orient Railway, it is reported, will build a line from Alpine. Tex., to the Shafter silver mining region, this being in addition to building its line to the Rio Grande, recently reported financed.

An official of the Gulf Line is quoted as saying that an extension has been cem pleted from Bridgeboro to Camilla, Ga. 20 miles, the contractor being John Lamb of Thomasville, Ga. It will be opened for use October 1.

The Henderson Interurban Rainway Co., Henderson, Ky., is reported to have secured rights of way for its projected electric line from Henderson to Owersboro, Ky., via Dixon, Unioutown, Sebree, Morganfield and Providence, Malcelm Yeannan of Henderson is president,

A. H. Classen of Oklahoma City is quoted as saying that the interurban electric railway from there to El Reno will be completed by December 1. The present terminus is at Yukon, and several con-struction crews are working to close the gap ebtween there and El Reno, 12 miles, The road will be laid with 70-pound rails, and hourly service will be established.

The Cotton Movement.

In his report for September 8 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during eight days of the present season was 231,160 bales, an increase over the preceding year of 86,192 bales. The net exports were 116,308 bales, an increase of 20,665 bales. The takings were, by Northern spinners, 22,382 bales, a decrease of 1724 bales; by Southern spinners, 40,037 bales, an increase of 8251 bales.

It is reported that 522 acres of land near Harlingen and San Benito, Tex., in the Rio Grande Valley, sold last week for

TEXTILES

The Glenn-Lowry Enlargement.

The Glenn-Lowry Manufacturing Co., William Coleman, president, Whitmire, S. C., will enlarge its plant and install new equipment at a cost of \$400,000 to \$500,-000. The structure will be of brick, with heavy pine timbers and pine and maple flooring. It will be equipped with 30,000 spindles, 700 looms and necessary carding machines, most of the machinery having already been purchased. The new equipment will consume between 30,000 and 40, oon pounds of cotton per week. Shand Enginering Co. of Columbia, S. C., is the architect in charge of construction. the date of opening bids for which has not been determined.

Atlantic Mills Corporation.

It is reported that the Atlantic Mills Corporation will be organized with \$10,-000,000 capital stock for the purpose of combining from 12 to 15 cotton yarn manufacturing companies of North and South Carolina. Those interested in the organization are said to include E. Strudwick. banker, of Richmond, Va.: Wm. M. Hamer, president of the Dillon Cotton Mills and Maple Cotton Mills, Dillon, S. C.; Henry M. Wilson and Robert Chapman, president and treasurer of the Marl-horo Cotton Mills, McColl, S. C., and J. F. Taylor, manager of the Kinston Cotton Mills, Kinston, N. C.

Maryville Hosiery Mills.

The Maryville (Tenn.) Hosiery Mills, R. B. Oliver, president and treasurer, previously reported as to invest about \$40,000 to rebuild burned plant, has begun construction. The building will be 300x36 feet, of brick construction, and cost about \$12,000 without equipment. The equipment will consist of 150 knitting machines, employing 200 operatives and having a especity of GM dozen pairs of hose. Burger of Maryville is the engineerarchitect in charge of construction,

Chesnee Mills.

The Chesnee (S. C.) Mills, capitalized at \$400,000, wil be ready to manufacture about January 1. This company's building construction is progressing rapidly. the main structure being two stories high and 482 feet long, while its machinery will include 20,000 spindles and 400 looms, driven by steam power. The output will be fine lawns. Other details have been stated heretofore

The Wallace Mills.

The Wallace Mills of Greenville, S. C. has organized with the following officers: President and treasurer, Thomas F. Parker; vice-president, T. M. Marchant; see retary, M. M. Trotter, Jr. This company was reported incorporated with \$300,000 capital stock last week. It has not yet announced its plans for manufacturing cotton goods,

Ebony Mills Company.

The Ebony Mills Company of High Point, N. C., has incorporated with au authorized capital stock of \$125,000 to establish a plant for the manufacture of hosiery, etc. Its incorporators are Philip T. Goodwin, J. H. Adams and Samuel B. Keen of New Orleans and J. E. Mills of High Point.

Will Install New Looms.

looms and install 70 new looms. This company at present operates 15,456 ring Co., the Southern Export Co. and the Saspindles, 704 narrow looms and 56 card- vannah Mercantile Co

ing machines on the production of plaids and shirtings.

Wants Prices on Linen.

The Mexican & Indian Drawn Work Co. of El Paso, Tex., wants prices on liten. This company has completed its 100x100foot concrete building, costing \$15,000, in which its Mexican and Indian hand operatives will make drawn work. Other details have been stated previously.

Walter H. Carter, American Hotel, St. Louis, will establish the bleaching and finishing plant mentioned last week.

LUMBER

[A complete record of new mills and build-ing operations in the South will be found in the Construction Department.]

Loomis & Hart Furniture Co.

Referring to plans to continue the forniture manufacturing department of the Loomis & Hart Manufacturing Co, of Chattanooga, A. J. Gahagan, treasurer of the company, writes to the MANUFACTUR-ERS RECORD as follows:

"The new company which will take over the furniture manufacturing department of the Loomis & Hart Manufacturing Co. will be the Loomis & Hart Furniture Co. This company will incorporate with authorized capital of \$200,000. The old company will continue in the manufacture of lumber. The change is made only for the purpose of separating these two distinct lines of the business. The planing-mill department of the old company has already been incorporated under the name of the A. G. Stivers Lumber Co., which is operated by the stockholders of the Loomis & Hart Manufacturing Co. The Loomis & Hart Furniture Co. has secured its charter, but has not organized. The management is going ahead now with the erection of new buildings. This will be one of the most thoroughly equipped and constructed furniture manufacturing plants south of the Ohio River. The new company is being organized by A. J. Gahagan, who has been treasurer of the Loomis & Hart Manufacturing Co, for more than a quarter of a century. The plant will be operated by electricity and equipped with modern appliances. ganization of the new company will be perfected before the first of October. The construction architect and the superintendent of construction and equipment of the new plant is C. H. Ballew of Chicago.

Deal for Pine Timber.

J. R. Buckwalter, president of the Lyndon Lumber Co., Wingate, Miss., and associates have purchased all the lengleaf pine timber of the Camden (Ga.) Lumber Co., and will incorporate the Refuge Lumber Co, to develop it. Mr. Buckwalter will be president of the new company, and John J. Paschal, who will at once establish an office at Camden, will be secretary and general manager. The purchasers will remove a mill from Mississippi to the property, erect a planing mill, install drykilns and construct tramroads to facilitate operations. It is stated that the timber, mill and other equipment represent an investment of \$200,000. L. S. Robb of Brunswick, Ga., negotiated the sale.

Hilton-Dodge Lumber Co.

A correspondent of the Manufactur-ERS RECORD reports the organization of the Hilton-Dodge Lumber Co. of Savannah, Ga., with a capital stock of \$7,500,-The Pee Dee Manufacturing Co. of Rockingham, N. C., will remove 70 old Hilton-Dodge Lumber Co., the Millhaven 000 for the purpose of consolidating the

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MINING

Iron Ore Operations in Georgia.

Editor Manufacturers Record:

The Bartow Iron & Mining Co. is capitalized at \$30,000, with the privilege of increasing to \$400,000 by vote of majority of stockholders. The property is at Emerson, Ga., in Bartow county, The company will put in side-track to the washer. and we expect to put in about six or eight washers and turn out four to six cars of ore per day. We have offers for the ore f, o, b, from different furnaces, according to the grade, ranging from \$1.50 per ton to \$3.55, as it runs high in manganese. I quote you the analyses of the State

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fron emetallic	:)									٠		33,35		
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			*17	.29	pure m	anga	nese
		3.0	0	E22	no Oue		

You will see from the above analyse that this ore runs high in manganese and low in phosphorus and sulphur; that is, the deep ore; the surface runs high in metallic iron.

We hope to be operating within 30 days, and even at the present low price of ore it seems like a paying proposition.

The land is located on the hillside, and we propose to operate with mules and scrapes to get the surface off until we get down to the higher grade of ore which contains the largest percentage of man-DR. J. V. HUBBARD.

Atlanta Ga.

Some Southern Metal Output.

The total value of the mine output of gold, silver, copper, lead and zinc in the Appalachian States, including Alabama, Georgia, South Carolina, North Carolina, Tennessee, Virginia, New Hampshire, Pennsylvania and New Jersey was \$10,-127,304, a decrease under 1909 of \$1,691, This represents the output of 100

Alabama produced 1622.16 ounces of gold, valued at \$33,533 and 268 ounces of silver, valued at \$145; Georgia 1722.25 of gold, valued at \$35,602, and 335 ounces of silver, valued at \$181; North Carolina 3291.68 ounces of gold, valued at \$69,045. 9053 ounces of silver, valued at \$4888, and 140,514 pounds of copper, valued at \$17,-845; South Carolina 1853.92 ounces of gold, valued at \$38,324, and 46 ounces of silver, valued at \$25: Tennessee 150,59 ounces of gold, valued at \$3113, 81,239 s of silver, valued at \$43,869, 16,-837,727 pounds of copper, valued at \$2,-138,391, and 1,932,555 pounds of zinc, valued at \$104,358, and Virginia 42.95 ounces of gold, valued at \$888, 128 ounces of silver, valued at \$69, 5402 pounds of copper, valued at \$686, 198,850 pounds of valued at \$8750, and 1,588,112 pounds of zinc, valued at \$85,758.

Tennessee Breaks Coal Record.

The total production of coal in Tennes-1910 was 7.121,380 short valued at \$7,925,350, an increase of 12 per cent, over the production of 1909, when the output amounted to 6,358,645 short tons, valued at \$6,920,564.

Tennessee's coal production in 1910 was the largest in the history of the State, and although in some districts the ability to absorb the increased output was somewhat

overtaxed and prices suffered accordingly, per hour, 80 to 120 clay pick or sledge the record for the State as a whole was a decided improvement over 1909. In both 1909 and 1910, however, prices were much lower than in any of the three preceding years. The highest prices attained for Tencoal in recent years were recorded in 1907, when the average for the State was \$1.25 a short ton. In 1908 the average price dropped to \$1.15 and in 1909 to advance, to \$1.11.

Another Davis Coal Mine.

The MANUFACTURERS RECORD is advised that the Davis Coal & Coke Co. of Davis, W. Va., and Baltimore is preparing to open another coal mine at Dartmoor, W. Va. This will be a drift opening, and the mine will be developed eventually to 800 tons daily capacity hand miners. The new mine is on the Reaver Creek seam and will add materially to the company's output of coal, the demand for the coal from this seam being steadily on the increase. Three mines near Weaver are now being operated by the company, the third having begun production last week, and the four operations will provide a daily output of over 2000 tons. Equipment details are managed by the company's superintendent at Davis.

FOREIGN NEEDS

Confectioneries and Toilet Soap.

H. Hassewer, Antwerp, Belgium, writes to the MANUFACTURERS RECORD:

"We should like to come especially into omumnication with manufacturers of confectioneries and toilet soap, and, unfortunately, we did not find any firms in your newspaper dealing in these articles. Eventually we should like to become the representatives of said manufacturers. Would it be possible for you to assist us in getting into communication with firms in question."

Agency for Lard and Dried Fish.

Salvatore Corallo, Siracusa, Catania, Italy, writes to the MANUFACTURERS

can house at present, but I would like to get in touch with them and then become your subscriber. Please give me the addresses of some American dealers in lard and in dried cod and other fish (of St. Louis, Terreneuve Island). I can do a good business in these if I can get them."

Interested in American Building Materials.

The Netherland-American Trading Co. (formerly Williams & Co.), the White House, Rotterdam, Netherlands, writes to the Manufacturers Record as follows:

"The products we are most interested in are American building materials, in introducing which we are well known here."

MECHANICAL

The Ober 44-Inch No. 2 Lathe.

The accompanying illustration shows the 44-inch No. 2 lathe made by the Ober Manufacturing Co., Chagrin Falls, O. This lathe is also made in 33 and 36-inch sizes. It will turn hammer, hatchet, pick, sledge and double-bitted axe-handles, whiffletrees, yokes, spokes, porch spindles, stair balusters, table legs, chair legs, ball bats and other similar work. It is described as having a capacity to turn from 150 to 400 machinists' hammer handles minute,

hammer handles, 50 to 70 whiffletrees yokes, chair or table legs, 200 to 250 spokes and other work in proportion.

It will turn the work round, aval, sonare or with any number of corners the whole length at once, or it will turn one end of the work one shape and the other end an entirely different shape at the same time. It leaves the wood so smooth that very \$1.09. The returns for 1910 show a slight little sanding is required. The only pat-

terns required are made of wood about one

inch thick of the shape of the end of the

articles to be turned, and are put on the

centers that hold the stick. Patterns can

be made and put on the lathe in a very

few minutes. The manufacturer claims

that costs for repairs are very small, as

it is very strong and durable, and there is

nothing about it that is apt to get our of

order. It is said that 42,000 handles have

been turned on this lathe without grinding

the knives or taking them off the heads.

It is provided with adjustable back rests.

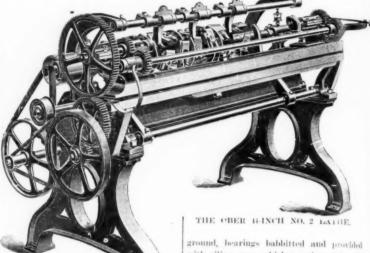
which can be made to press against the

stick while being turned to keep the stick

from springing. The 44-inch lathe will

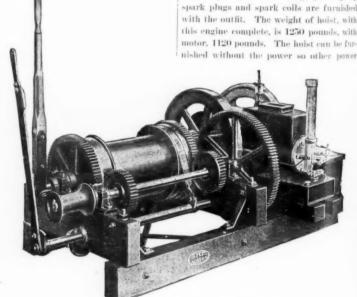
The C. H. & E. Builders' Hoist

The new double-acting builders' hoist, manufactured by the C. H. & E. Manufacturing Co. of Milwaukee, is shown in the accompanying illustration. This hoist was designed for running single or double platform elevators. It is described as a hoist built to stand the wear and tear of hard usage, and is easily moved about. All gears have been cut, shafts turned and



with oiling cups, which together make the outfit noiseless and reliable

This hoist, as shown in the illustration, is fitted with six-horse-power gasoline engine, cooled from water hopper. Its capacity permits it to handle a load up to 2000 pounds and hoist 1000 pounds 200 feet per minute, 500 pounds 350 feet per minute and 350 pounds 400 feet per minute. Similar results are obtained by using a direct-acting or alternating-current me tor in place of the gasoline engine. The hoist is mounted with either of these, as may be desired. The engine runs at 450 to 500 revolutions per minute, and the motor at 1650 to 1750 revolutions per minute. The cylinder and frame of the gaso line engine are cast in one piece of special gray iron, making it very rigid. The connecting rod is made of manganese bronze and the crank end lined with Parsons' white brass. The crankshaft is high earbon drop-forged steel. High-grade jump spark plugs and spark coils are furnished with the outfit. The weight of hoist, with this engine complete, is 1250 pounds, with motor, 1120 pounds. The hoist can be fur-



THE C. H. & E. DOUBLE-ACTING BUILDER'S HOIST.

turn yokes or whiffletrees up to 47 inches | attachments may be used if necessary of long. Its weight is about 1600 pounds, floor space required 32x58 inches. Each lathe requires about three horse-power. A good countershaft is furnished with each lathe. The pulleys on the countershaft are 12 inches in diameter for six-inch belt, and should turn 1000 revolutions per

preferred.

The hoist, with engine or motor, is mounted on 4x6-inch and 3x8-inch timbers, on skids or wheels, so the outfit may be easily moved.

The motors are five horse-power, single-phase, 60-cycle, 110 or 220-volt, two and three-phase, 220 or 440-volt, or direct cur-rent, 110 or 220-volt.

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Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to perify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "it is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to always glad to have our attention called to rors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. metimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, al-though it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to in-formation published in this depart-ment, it will be of advantage to all concerned if the Manufacturers Rec-

The Daily Bulletin of the Manufac-turers Record is published every busi-ness day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the en-largement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription to the Daily Bulletin is included for the contract period.

BRIDGES, CULVERTS, VIADUCTS

Fla., Bradentown.—Manatee county con-templates voting in October or November on bond issue of about \$100,000 for construction of bridge over Manatee River between Bradentown and Palmetto; structure to be of steel; 12-floot draw spans; roadway 20 feet in clear and have 4-foot walk; estimated st \$85,000.

Fla., Bradentown.—Manatee county will onstruct three bridges across Braden Creek, ear Manatee; County Commissioners invite

ruct reinforced concrete arch bridge over big branch on Websters Ferry Rd.; length, 50 feet; roadway, 12 feet wide; bids received until October 4; G. A. Veach, chairman County Commissioners. (See "Machinery Westerleithers)

Ga., Dalton.-Whitfield and Gordon County Commissioners awarded contract at \$2675 to II. C. Quinn, Atlanta, Ga., representing Champion Bridge Co., to construct steel bridge over river at Greeson's Ford.

Ga., Moultrie.—Colquitt county will vote a November on \$85,000 bond issue for construction of steel bridges. Address County

Ky., Hazard.-Hazard Bridge Co, will conafract two-span steel wagon and foot bridge; 13 or 14x200 feet; cost \$15,000; plans not com-plete; B. P. Woolton may be addressed. (Company recently noted incorporated with \$15,000 capital stock by Jesse Morgan and

La., Lake Charles,-T. H. Mandell, civil enneer, is making surveys preliminary to ostruction of bridge over Calcasicu River; P. Weber, president committee in charge. (Recently mentioned.)

La Bermuda.-Natchitoches Parish Police Jury, P. E. Prudhomme, president, Natchi-toches, La., will receive bids until October 4 for construction of steel bridge over Cave River at Bermuda. (See "Machinery Want-

Miss., Edna.—Marion County Supervisors, Columbia, Miss., awarded contract at \$3959 to Joliet (III.) Bridge & Iron Co. to con-struct steel bridge over Upper Little River near Edna.

N. C., Greensboro.-Guilford County missioners awarded contract to Owego (N. Y.) Bridge Co, and York (Pa.) Bridge Co, to construct two bridges across Horsepen Creek and South Buffalo Creek, respectively; cost of both about \$2800.

Okla., Chickasha.—Grady county will vote October 17 on \$40,000 bond issue for bridge construction; proposes to construct 80 construction; proposes to construct bridges. Address County Commissioners.

Okla., Marietta.—Love county will vote September 23 on \$75,000 band issue for bridges and roads. Address County Commissioners. Okla., Oklahoma City.-Oklahoma County ioners awarded contract to Kansas City Bridge Co., Kansas City, Mo., at \$7294 to construct two 20-foot and one 90-foot steel bridges. (See "Drainage and Irriga-

S. C., Charleston.—Charleston Bridge Co will repair bridge damaged by storm at loss of \$7000 to \$8000.

S. C., Florence.—Pee Dee Bridge Co., W. R. Bonsal, president, awarded contract to erect bridge across Pee Dee River. (Recently noted chartered with \$75,000 capital stock o construct bridge.)

8. C. Modoc.—Edgefield county will construct steel bridge over Big Stevens Creek about two miles from Modoc; structure to consist of one steel span 125 feet long, with roadway 12 feet in clear; wooden trestle approaches of 210 feet on cast side and 105 proaches of 250 feet on east sue and 25 feet on west; bids received until Septembe 25; W. G. Wills, County Supervisor, Edge field, S. C. (See "Machinery Wanted.")

Tex., Houston.—City Council adopted plans and specifications by F. L. Dormant, City Engineer, for reinforced concrete bridge over White Oak Bayou on Houston Ave., and authorized II. B. Rice, Mayor, to advertise for

Va., Portsmouth,-City contemplates con va., Persmouth.—City contempates con-struction of concrete culvert and roadway at Swimming Point; also reinforced con-crete bridge on 1st St.; V. O. Cassell, Jr., City Engineer, will prepare estimates.

Ya., Sussex.—P. St. J. Wilson, State High-way Commissioner, Richmond, Va., receives bids until September 18 for construction of five steel bridges ranging in length from 34 feet to 95 feet, with 12-foot roadway; con-crete substructure; plans and specifications at office of County Clerk. (See "Machinery Wanted."

W. Va., New Martinsville.-Wetzel c will construct low-girder 2-span steel bridge with concrete floor across Big Fishing Creek at Porters Falls; bids received until Septem-ber 16; 8, Myers, clerk. (See "Machinery Wanted.")

CANNING AND PACKING PLANTS

Ala., Birmingham.—Armour & Co. (main office, Chicago, III.) will rebuild refrigerating, sausage-making and packing plant burned at loss of about \$200,000.

Ga., Atlanta.—Cudahy Packing Co. will rebuild plant recently burned; loss \$10,000; Mackle-Crawford Company, New Albany, Ga., is lowest bidder.

S. C., Charleston.-Charleston Canning Co will repair cannery damaged by storm at loss of about \$10,000.

Va., Taft.—Taft Fish Co. increased auth ized capital stock from \$50,000 to \$200,000.

Va., Waynesboro.—Waynesboro Evaporating Co. incorporated with \$10,000 capital stock; John Plumb, president; J. W. Ellison, vice-president; W. G. Ellison, secretary-

COAL MINES AND COKE OVENS

county; as soon as railroad can be con-structed to property operation will be begun by company composed of Messrs. Snead and Farmer, Snead & Meguire Coal Co. of Louisville, Ky., and several associates; railroad has been surveyed.

has been surveyed.

Ky., Barbourville.—Interstate Coal Co. acquired properties of Tye Fork Coal Co., purchasing 800 acres for \$50,000 and leasing remaining 806 acres; will undertake develop-

Ky., Lexington. - Knott County Coal & Ay, Lexington. — Knott County Coat & Lumber Co. Incorporated with \$250,000 capital stock by T. T. Forman of Lexington, George W. Reese, David H. Davies, Charles A. Ling and A. P. Stephens, all of Johnstown, Pa.

Lexington. - Knott County Coal & Lumber Co. Incorporated with \$250,000 capital stock by George W. Reese, David H. Davies, Charles S. Ling, A. P. Stephens, Johnstown, Pa., and T. T. Forman, Lexington.

Okla., Williams.-Williams-Hemphill Coal Co. incorporated with \$1000 capital stock by George T. Williams and J. C. Humphrey of Fort Smith, Ark., and W. T. Henry of Wil-

Tenn., Chattanooga.—Hidden Treasure Co. Incorporated with \$65,000 capital stock by R. S. Faxon, M. M. Hedges, R. H. Hunt and A. N. Sloan

Va., Charleston.-Elk Manor Coal Co., P. M. McClanahan, president, contemplates increasing capital stock from \$10,000 to \$50,000.

W. Va., Logan,-Union Coal Land Co. in orporated with \$75,000 capital stock by S. A. Draper, J. Cary Alderson, E. T. England and others; is holding company only; has 750 acres of coal land.

W. Va., Pemberton.—Pemberton Fuel Co. (recently reported incorporated with \$10,000 capital stock by Prince E. Lilly of Glen Morgan, W. Va., and others) will develop 150 acres of coal land; operations begun. (See "Machinery Wanted.")

CONCRETE AND CEMENT PLANTS

Tenn., Knoxville.—H. R. Blauvelt is re-ported as interested with Knoxville and Eastern capitalists in plan to organize \$600, 000 company to build Portland cement plant.

COTTON COMPRESSES AND GINS

Ala., Tuskegee.—Tuskegee Gin & Oil Co. incorporated with \$4000 capital stock by E. W. Thompson, W. P. Barrow and E. L.

S. C., Greenwood -Panola Ginning Co. in corporated with \$4000 capital stock; F. S. Evans, president and treasurer; L. B. Hughes, vice-president; G. B. Merchant, secretary.

Ginning Co., H. T. Morrison, president, will operate equipped plant. (Recently noted

S. C., Rowesville,-Rowesville Off Co., A C. Dukes, president, will operate ginnery in connection with oil mill; daily capacity, 45 to 50 bales of cotton. (See "Cottonseed-oil

Tex., Clarksville.—Farmers' Gin Co. incorporated with \$13,000 capital stock by J. E. Soward, John Miesch, C. E. Terry and others.

Tex., Rio Hondo.-Rio Hondo Gin Co. in corporated with \$6000 capital stock by Paul, Edward H. Smith and Alba Hey all of San Antonio, Tex.

COTTONSEED-OIL MILLS

Ala., Tuskegee.—Tuskegee Gin & Oil Co. incorporated by E. W. Thompson and others. (See "Cotton Compresses and Gins.")

Miss., Scott.—Mississippi Delta Planting Co., L. K. Salsbury, president, main office, 1205 Central Bank Bidg., Memphis, Tenn., will expend \$90,000 to \$100,000 to erect cottonoil mill; 40x120-foot mill building and 60x240 foot seedhouse; machinery contract placed; construction begun; W. E. Crenshaw is superintendent. (Recently mentioned.)

Okla., Oklahoma City.—American Ice & Oil Co. (recently noted incorporated) has pur-chased plant and will equip to manufacture ice and oil-mill products; oil-mill machinery purchased. (See "Ice and Cold-storage

COAL MINES AND COKE OVENS

Ky., Barbourville. — Kenneth Meguire of Louisville, and L. W. Farmer, Barbourville, leased 10,000 acres coal land in Harlan lings, vice-president, secretary and treasurer.

S. C., Gray Court.—Gray Court Oil & Fervoting on \$40,000 to \$50,000 bond issue for construction of electric-light plant and stock; F. D. Hunter, president; G. W. Owless acres coal land in Harlan lings, vice-president, secretary and treasurer.

S. C., Gray Court.—Gray Court Oil & Fervoting on \$40,000 to \$50,000 bond issue for construction of electric-light plant and water-works. Address The Mayor.

Fla, New Smyrna.—A. D. P. Smith (re-

S. C., Rowesville.—Rowesville Oil Co. in-corporated with \$45,000 capital stock; A. C. Dukes, president; E. N. Chisolm, vice-presi-dent and treasurer; George V. Zeigler, secre-tary; will operate equipped plant; capacity of seedhouse, 1000 tons of cottonseed; cost of oil mill and ginnery, \$48,000; succeeds Rowe rille Cotton Oil Co, previously noted to r build burned plant.

Tex., Knox City.—Knox City Cotton Oil Co. incorporated with \$40,000 capital stock by J. L. Jones, L. W. Jones and J. F. Jones.

DRAINAGE AND IRRIGATION

La., Crowley.—Fifth Ward Road Commis-sion contemplates construction of drainage canal 20 feet wide and 4 feet deep from Sixth ward line westward to Mermentau River.

La., Donaldsonville,-Mississippi and La La., Donaldsonville,—Mississippi and La-fourche Drainage District will dredge Bayou Verret from present location of dredge to point near Texas & Pacific Railway, west of LaPice Station, about 4½ miles; bids reelved until September 19. (See "Machinery Wanted.")

N. C., Moyock.—S. W. Gregory, Elizabeth City, N. C.; W. G. Ferobee and C. L. Fere-bee, Gregory, N. C., and C. R. Sims, Norfolk, Va., organized drainage district embracing 25,000 acres between Moyock in Currituck county and South Mills in Camden county; will issue bonds for construction of drainage

Okla., Oklahoma Clty.-Oklahoma County Commissioners awarded contract to Sprankle Commissioners awarded contract to Sprankle & Company, Fort Wayne, Ind., at \$32,296.82 for construction of canal in North Canadian Drainage District No. 3, and to Kansas City Bridge Co., Kansas City, Mo., at \$7294 to construct two 80-foot and one 90-foot steel bridges; canal is to be 6 miles long and will straighten course of North Canadian River, which now overflows 18 miles from Canadian county line to Packingtown.

Okla., Yelton.—Farmers' Mutual Irrigation 'o, incorporated with \$5000 capital stock by A. H. and W. R. Barton and L. D. Black-

Tex., Pecos.—Pecos & Toyah Lake Irrigation Co. awarded contract to J. P. Nelson Construction Co., San Antonio, Tex., for construction of 12 miles feeder canal; diversion dam in Pecos River; dam at Toyah Lake and outlet works; 65 miles distributing canal and all necessary laterals; estimated cost, \$1,500,000. Officers are Chas, A. Loomis, president, Kansas City, Mo.; F. W. Taylor, first vice-president, Manila, P. I.; J. W. Levin, second vice-president and general manager, Pecos; F. E. Dobbins, secretary and treasurer, Kansas City; Geo. M. Bull, chief engineer, Denver, Col., and Pecos; Bull & Withan of Denver, consulting engineers, (Previously noted.)

Tex., Rio Medina.—Medina Irrigation Co.,

neers. (Previously noted.)

Tex., Rio Medina.—Medina Irrigation Co., P. O. Box 1140, and office 529 E. Houston St., San Antonio, Tex., (controlled by Dr. F. S. Pearson, 25 Broad St., New York), has completed preliminary surveys of canal system; main dam, now under construction, will be 165 feet high and contain 228,000 cubic yards rubble concrete; overflow diversion dam 48 feet high with 444-foot crest will be built; there will be about 28 miles main canal, with average bottom width of 15 feet in side hill and 20 feet in level ground; two reinforced concrete siphons will be constructed to cross and recross Medina River; also several sections of lined concrete channels and metallic and recross Medina River; also several sec-tions of lined concrete channels and metallic flumes; total of main canal excavation about 1,400,000 cubic yards, with contract sections averaging about 120,000 yards per section; distributing system will require about 400 miles secondary canals and lateral ditches; preliminary profile available for inspection; full specifications to be available as location progresses; contractors invited to correspond and inspect proposed work with view to suband inspect proposed work with view to mitting bids soon after October 1; A. W. K. Billings of New York, engineer in charge, representing Dr. Pearson; T. B. Palfrey. local manager; J. A. Sargent, irrigation engineer, P. O. Box 1140, San Antonio; full description of this work published previously, including mention of incorporation with \$6,000,000 capital stock to irrigate 60,000 acres of land. (See "Machinery Wanted.")

ELECTRIC PLANTS

Ala., Alabama City. — City contemplates voting on \$40,000 to \$50,000 bond issue for construction of electric-light plant and

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

cently noted as chairman) states that committee has not been appointed to promote electric lighting, water supply and sewer construction; as previously stated, arrangement of bond issue is contemplated.

Fla., Tallahassee.—City will install 306 K. W. direct-connected equipment with switch-board panel; bids opened 8 P. M. September 25; C. H. Ellis, superintendent water, gas and cleetric plants. (See "Machinery Wanted.")

Ga., Cordele.—City contemplates voting on \$30,000 bond issue for electric-light plant. Address The Mayor. (See "Road and Street Work")

Ky., Hazard.—Hazard Light & Water Co., (recently noted incorporated with \$25,090 capital stock by James B. Hogg and others) has not definitely prepared plans for electric-light plant. (See "Machinery Wanted.")

Md., Bladensburg.—Washington, Westminster & Gettysburg Railroad Co., Southern Bldg., 807 15th St. N. W., Washington, D. C., has not purchased mill building for electric power-house. (Recent report incorrect.)

Miss., Columbus.—Louis Shull, care of The Subway, and associates contemplate installation of electric plant, operated by gasoline power, for 400 16-candle-power incandescent lights and three small passenger elevators. (See "Machinery Wanted.")

Mo., Monett.—City awarded contract to Squire Electric Co., Kansas City, Mo., at \$28,000 to construct electric-light plant, pole lines, etc., and to H. F. Bramer of Monett at \$3197 to erect power-house; Rellins & Weston, consulting engineers, Beats Bidg., Kansas City, Mo. (Recently mentioned.)

Tenn., Maryville,—Maryville Electric Light, Heat & Power Co. incorporated with \$2500 capital stock by I. B. Zeigler, J. C. Sterchl, John M. Clark and others.

Tex., Decatur.—Decatur Water & Light Co. will rebuild electric-light and power plant burned at loss of \$6000.

FERTILIZER FACTORIES

Ala., Grdsden.—W. W. Hendricks of Cooksville, Tenn. (recently reported as planning to establish plant), states no arrangements have been made as to location.

Ala., Wetumpka.—Coosa River Fertilizer Co., recently reported incorporated, has elected L. C. Smith, president and general manager; A. F. Huff, vice-president, and C. G. McMorris, secretary-treasurer; capital stock \$25,000.

Ga., Coleman.—Coleman Guano Co, incorporated with \$20,000 capital stock and privilege of increasing to \$50,000; will take over Hammack, Rich & Sons of Coleman, Carnegle and Edison, Ga.

Ga., Midville,—Central Fertilizer Co. incorporated with \$150,000 capital stock by C. G. Rawlings, A. L. Evans, George D. Warthen, John E. Smith and others.

N. C., Wadesloro.—Virginia-Carolina Chemical Co., S. T. Morgau, president, Richmond, Va., has purchased site for plant; building plans not completed. (Recently noted.)

N. C., Washington.—Pamileo Chemical Co. contemplates erecting addition to fertilizer factory.

8, C., Aiken.—Farmers' Storage Co. increased capital stock from \$10,000 to \$100,000 and changed name to Farmers' Storage & Fertilizer Co.

S. C., Gray Court.—Gray Court Oil & Fertilizer Co. incorporated; F. D. Hunter, president. (See "Cottonseed-Oil Mills.")

8. C., Trenton.—Trenton Fertilizer Co. incorporated with \$7000 capital stock by B. R. Tillman, J. F. Bettis, J. C. Long and others.

FLOUR, FEED AND MEAL MILLS

S. C., Bamberg.—George II. Smoak will bulld grist mill.

Tenn., Chattanooga.—Chattanooga Milting Co. incorporated with \$25,000 capital stock by R. B. Henderson, D. S. Henderson, D. R. Hawks, J. H. Gleaves and H. C. Hawks,

FOUNDRY AND MACHINE PLANTS

D. C., Washington—Pumps, etc.—National Hydraulic Co. incorporated with \$2000 capital stock by Gustav E. Haar, 2225 Nichols Ave.: Herbert R. Haar and John H. Stephens.

Mo., St. Louis—Iron Works.—Harry Benjamin Ry. Equipment Co., Harry Benjamin, president, 727 Central National Bank Bildg., purchased Block-Pollak Iron Co.'s plant, located at 8000 S. Broadway, and will resume operations; Jerome Benjamin will be superintendent; purchasing company will retain its offices in Central National Bank Bildg., but will make enlargements.

Mo., St. Joseph-Cars.-Wyco Car Co. in-

vorporated with \$5000 capital stock by Huston Wyatt, G. N. Johnson and J. E. Eberly.

Mo., St. Joseph—Iron.—Ross Frazier Iron Co. Incorporated with \$100,000 capital stock by John A. Ross, Jacob M. Ford, Charles A. Frazier and others.

Mo., St. Louis — Stoyes, — Wrought Iron Range Co. awarded contract to Murch Bros. Construction Co. of St. Louis at \$179,425 to creet foundry on site of 15 neres; will erect four buildings, largest to be two stories, 300 feet square; all structures to be fireproof; plans by Baker & Knell of St. Louis. (Mentioned in June.)

Mo., St. Louis—Radiators,—Continental Radiator & Foundry Co, will establish radlator plant; first year's output to be 3,000,000 square feet of radiation.

N. C., Southmont—Cotton Picker,—The Southmont Company Incorporated to manufacture cotton picker, J. M. Windham is secretary, (Previously mentioned.)

Okla., Oklabona City—Gas Stoves.—Royal Stove Co. will operate plant to manufacture gas stoves; J. R. King, president; Wisson Newman, vice-president; C. L. Rickeman, secretary treasurer; has building and maebinery. (Recently reported incorporated with \$19,000 capital stock.)

Okla., Oklahoma City.—Central Foundry Co., Eugene G. Baker, vice-president, will cularge plant; cost \$55,000.

S. C., Bamberg,-George II, Smoak with erect blacksmith and wheelwright shop.

S. C., Charleston—Iron Works,—Riverside Iron Works will repair foundry damaged by storm,

8, C., Spartanburg — Machinery, — Beaver Fam Machinery Co, Incorporated with \$25,000 capital stock; A. D. Cudd, president; Arthur Irwib, vice president; E. P. Parks, secretarytreasurer.

Tenn., Rockwood, — Rockwood Machine Works will establish plant; machinery ordered; building 50x100 feet; frame; fron roof and sides; cost \$2000; contract let; E. W. Morris, manager.

GAS AND OIL DEVELOPMENTS

Ark. Fort Smith.—Southwestern Genera Gas Co. incorporated with \$2,000,000 capita stock to develop gas fields in vicinity of Fort Smith; J. Walter Gillette, president James Brizzolara, secretary; N. I. Garrison treasurer.

Ky., Busseyville.—Square Deal Oil Co. incorporated with \$6000 capital stock by C. V. Bartels, Webb Holt, H. W. Bussey, J. W. Perry and B. J. Calloway.

Ky., Busseyville,—Square Leal Oil & Gas Co., C. V. Bartels, president, incorporated to develop oil fields; will drill by contract. (See "Machinery Wanted.")

La., New Orleans.—Sunrise Oil & Development Co, incorporated with \$2,000,000 capital stock; William Hobbs, president; Guy Perkins, vice-president; C. B. Maginnis, treasurer.

La., Shreveport.—Continental Oil Co. incorporated with \$25,000 capital stock; J. W. Atkins, president; J. B. Atkins, vice-president; W. S. Atkins, secretary-treasurer. Okla., Ochelata.—Charles Wilson, Tulsa,

Okla., Ochelata.—Charles Wilson, Tulsa, Okla, trepresentative Higgins Oil & Fuel Co.t, purchased Grove Oil Co., Willard Oil Co. and Missouri Mining Co., including 280 acres of oil lands; purchase price \$12,000; development will be continued.

Okla., Oklahoma City.—Glenn Poot Oll & Gas Co. Incorporated with \$100,000 capital stock by H. D. Vickery, F. A. Vickery, H. E. Arnold and others.

Okla., Sapulpa.—Eastern Oklahoma Gas Coincorporated with \$10,000 capital stock by II. II. McFann, G. W. McFann and Virgil Hicks.

Okla., Spiro.—LeFlore Gas Co. incorporated with \$25,000 capital stock by R. D. Road, W. R. Golden, H. V. Foster and J. E. Meloy, all of Bartlesville, Okla.

Tex., Terrell.—Kaufman Oll Co. incorporated with \$10,000 capital stock by J. G. Waren, Frank Martin and J. B. Zink.

W. Va., Clarksburg.—Poster Creek Oil & Gas Co. Incorporated with \$25,000 capital stock by E. D. Brown, I. G. Reby, H. A. Lemon, C. H. King and Charles H. Huusey, all of Uniontown, Pa.

ICE AND COLD-STORAGE PLANTS

Ala., Montgomery.—Alabama-Georgia Syrup Co., L. B. Whitfield, president, has not let contract (as recently stated) for cold-storage plant; 65x69 feet; two stories; plans by Okel & Cooper, Montgomery; bids opened September 9.

Fla., Tampa.-Consumers' Ice Co. contemplates improvements to plant, including increasing ice capacity, cold-storage facilities, etc.

Ga., Atlanta.-Blue Seal Ice Cream Co. will install refrigerating plant and five-ton ice making system. (See "Miscellaneous Factories.")

Ga., Augusta.—Atlantic fee & Coal Corporation, E. Woodruff, president, will expend \$15,000 for improvements to fee and coldstorage plant; daily capacity, 120 tons of fee, (Recently noted as People's Ice Co. and to have awarded contracts for improvements.)

Md., Baltimore.—American Ice Co., Wesley M. Oler, president, 15 Exchange Pl., Jersey City, N. J., awarded contract to Fidelity Construction Co., Kuickerhocker Bidg., Baltimore, to erect iee-manufacturing and storage plant at Franklin and Smallwood Sts.; one and twe-story buildings 20x110 feet; daily capacity, 125 tons ice; storage space for about 14,000 tons. Following equipment contracts awarded; Ice machinery, to Frick Company, Waynesboro, Pa.; hollers, Erie City Iron Works, Erie, Pa.; engine and swokestack, Alphons Custodis Chimney Construction Co., Bennett Bidg., New York; total cost of plant about \$200,000; plans on file at local office, 326 Calvert Bidg., Baltimore (Mortimer & Co. of New York, recently reported as having contract to creet this plant, are the architects.)

Mo., Arrow Rock. - Arthur Dickson will erect ice plant.

N. C., Lexington,—Company has been or ganized by E. J. Buchman, J. T. Hedrick an I.E. R. Craven to establish ice plant.

Okla., Oklahoma City.—American Ice & Oil Co, has purchased plant and will install machinery to manufacture ice, etc. (Recently reported incorporated with \$50,000 capital stock by C. II. Eckford and others.)

Tex., Brownsville,—John R. Box will erect cold-storage plant to cost \$30,000; construction begun.

Va., Herndon.—Wm. Eads Miller Co. centemplates establishment of ice plant. (See "Machinery Wanted.")

IRON AND STEEL PLANTS

Tenn., Chattanooga—Iron and Steel Plant. L. S. Colyar and associates contemplate organizing company with \$15,000,000 capital stock to build steel plant of 1000 tons daily capacity. Referring to this enterprise, Mr. Colyar writes to the Manufacturers Record: "There is as yet nothing definite about steel plant. Myself and associates have acquired large acceage of iron ore and coal lands near this city, and are making an effort to secure money for building large iron and steel plant with all accessories. As soon as organization takes definite shape will furnish information."

Tenn., Chattanooga-Steel Plant.-L. S. Colyar is reported as to organize company to establish steel plant near Chattanooga. Referring to the enterprise a correspondent wires to the Manufacturers Record: "L. S. Colyar will, it is reported, organize \$15,000,000 corporation to establish steel plant near Chattanooga to have 1000 tons daily capacity; has options on ore lands; local capital."

LAND DEVELOPMENTS

Ala., Montgomery.—Southern Realty & Development Co. incorporated with \$65,000 capital stock by E. W. Clapp, P. A. Travis and I. W. Vardaman.

Ala., Montgomery,—City defeated \$25,000 bond issue for park purposes. Address The Mayor. (Recently mentioned.)

Ala., Robertsdale,—Gilliner Plantation Co-(recently noted incorporated with \$5000 capital stock) has organized with W. J. Gilliner president, John C. Allen vice-president, F. B. Hofft secretary, J. H. Kober treasurer; main office, Monmouth, Ill. (See "Machinery Wartstale")

D. C., Washington.—Pan-American Union, John Barrett, director, 1712 H St. x. W., awarded contract to Norcross Bros. & Co., awarded contract to Norcross Bros. & Co., Worcester, Mass., at about \$100,000 to improve grounds surrounding Pan-American Bidg, at 17th St. and Potomac Park; present driveway on 17th St. will have marble balustrade on one side and low coping on other; on each side of central approach will be ornate lamps upon marble pedestals; in rear of lawns on B and C Sts. will be garden containing sanken section with pool 80x30 feet and ornamental fountain at one end; on each side of pool ground will slope up to gravel pathway surrounded by marble balustrade; terminal feature will include taree arches corresponding to those on front of main building and opening upon court, which will be finished in decorative tile; other improvements will include two marble gateways, marble steps and marble wall about

four feet high around entire length of grounds: Kelsey & Cret, Philadelphia, Pa., prepared plans. (Recently mentioned.)

Fla., Lake County.—Hagg Investment Co., Lawrence W. Hagg, president, main office 27 New York Life Bidg., Kansas City, Mo., will develop tract of land in Lake county known as Monte Vista Park Farms for agricultural purposes; subdivide into 10 and 20acre tracts, construct boulevards, set out trees, shrubbery, etc.; also creet clurch to cost \$13,500; Southern office, 806 Atlantic National Bank Bidg., Jacksonville, Fla.

Ca., Atlanta.—J. T. Kimbrough will reneove planing mill and lumber yards from Willingham property (12 acres) and develop land for factory sites; cost of land, \$25,000

Ga., Atlanta.—W. C. Porter of Atlanta and F. B. Haddock of El Paso, Tex., purchased about 73 acres of land on Camelton Rd, for \$25,000; will subdivide into 400 tots and develop residential section.

Ga., Atlanta.—E. W. Grove Realty Co. incorporated with \$100,000 capital stock by E. W. Grove of St. Louis, Mo.; F. La Seely and J. Csear Mills.

Ga., Atlanta, — Charles E. & George II. Boynton have plans by L. W. & C. S. Roberts, civil engineers, Fulton Court Bldg., Atlanta, to develop 22 acres of land for factory sites; will expend about \$20,000.

Ga., Marshallville,—Drew Hamilton sold to South Carolina company 1199 acres of land for \$38,000; plans to divide into small farms.

Ky., Owenton.—Owenton Land & Resity Co. Incorporated with \$20,000 capital stock by J. W. Gayle, James Gayle and P. O. Minor,

Ky., Paducah.—Kentucky-Georgia Land Co. iacorporated with \$35,000 capital stock by S. T. Raudle and Brack Owen of Paducah and J. B. Train, Smithland, Ky.

Md. Annapolis Junction.—F. W. Roigiano and Skinner & Herrmann, 895 Calvert Ridg., Baltimore, Md., purchased 1000 acres land along Little Patuxent River, in Anne Armidel county, near Annapolis Junction, for about \$25,000; 400 acres in farm lands and balance in timber; purchasers will probably divide tract into building lots for development; plans not definite.

Md., Baltimore. — Arden on-the-Severn incorporated with Henry Keidel president, 46-407 W. German St.; J. Edward Duker viespresident, Arthur Boehm treasurer and M. E. Ferguson secretary; will develop 250 acres on Severn River; tract will be divided into five-acre lots, each fronting on water; avenues will be built, electric-light system constructed, etc. (Recently mentioned.)

Md., Cumberland. — Cumberland Heights Improvement Co., R. D. Johnson, president, purchased 65 acres and will develop residential section; tract is to be graded, driveways and avenues constructed, etc.; proposed that streets be about 60 feet wide. (Recently reported organized with \$50,000 capital stock.)

Mo., New Madrid.—Hayti Development Co. incorporated with \$2000 capital stock by Matt J. Conran, Samuel L. Hunter, Murray Phillips.

Mo., St. Louis County.—Davis Realty Development Co., Everett Davis, president, St. Louis, Mo., purchased 48 acres adjoined Maryland Terrace in St. Louis county, and will develop residential suburb; purchase price reported at \$200,000; planned to expend \$75,000 to \$100,000 in improvements, including streets, sewers, etc.; streets are to be 80 feet wide, and main east and west street will be 400 feet long; grading will involve removal of 150,000 cubic yards of earth; C. H. Colly, City Engineer, of University (Station St. Louis), will be in charge.

N. C., Bayboro.—Pamileo Land Co. incorporated with \$290,000 capital stock by Henry B. Stevens, Asheville, N. C., Joseph Keys and James E. Walker of Roanoke, Va., and others.

Okla., Creta,—Creta Development Co. incorporated with \$16,000 capital stock by J. C. Drew, Altus, Okla.; F. M. Burkes and A. H. Pavidson, Dallas, Tex.

N. C., Greensboro.—Alleghany Heights incorporated with \$25,000 capital stock by H. A. White and others.

N. C., Manchester.—J. F. Jordan of Kent-Jordan Company, Greensboro, N. C., and Washington, D. C., states that 1500 acres (instead of 200 acres as recently reported) has been reserved for resort, town to be known as Pinewild; project embraces hotels, residences, clubhouses, golf links, athletic field and lakes; portion of 40,000 acres of land (previously noted purchased) adjoining town is being cultivated in cotton, etc.; town and farm developments are separate; plans construction of road to Fayetteville and later to connect with national highway to Greens1911.

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Okla. Clinton.—City will vote September 19 on \$10,000 bond Issue for park improve-ments. Address The Mayor.

ments. Address The Mayor.

Tenn.. Chattanooga.—Chattanooga Land
co., S. T. Dewees, president, Hamilton National Bank Bidg., will expend \$25,000 to
gaton for improvements to Alton Park addition: arrangements made for mechanical
and engineering work. (Recently noted to
increase capital stock to \$100,000.)

Tex.. Brownsville.—Hidalgo Land & Improvement Co. incorporated with \$24,000 capital stock by C. S. Morton, R. B. Renfro, J. B. Scott and others.

M. Va., Fairmont.—Outlook Farms Co. in-corporated with \$15,000 capital stock by J. M. Hartley, W. J. Weigel, Glenn F. Barns, M. M. Neely and H. S. Lively; proposes to de-velop town site, construct sewers and elec-tric-light plant, etc.

LUMBER MANUFACTURING

Ala. Sheffield.-E. D. and K. G. McConnell, Chicago, Ill., will establish lumber and venecy mill.

Ala., Whiten.—R. P. Walker and P. G. Hol-lingsworth of Howelton, Ala., purchased tract of timber land and will remove sawmill from present location to develop property.

from present tocation to develop property.

Fla., Eau Gallie.—Clark Bros., Kissimmee,
Fla., purchased Jane Green Swamp, estimated to contain about 5,000,000 feet of cypress and pine timber, and will develop.

press and pine timber, and will develop.

Ga., Camden.—Refuge Lumber Co, will be incorporated to develop long-leaf yellow pine timber acquired from Camden Lumber Co.;

J. R. Buckwalter, president of Lyndon Lumber Co., Wingate, Miss., will be president of the new company; John J. Paschal, secretary the new company; John J. Paschat, secretary and general manager; purchasers will re-move mill from Mississippi to Camden; will install drykiins, planing mills, build tram-roads, etc.; investment reported to apprexi-mate \$200,000.

Ky., Lexington.—Knott County Coal & Lumber Co. Incorporated with \$250,000 capital stock by George W. Reese and others.

La., Castor. — Bodcan Lumber Co. pur-chased 30,000 acres of timber land and will

Miss., Tylertown. — O. T. Magee Square Timber & Lumber Co. incorporated with \$2000 capital stock by O. T. Magee, G. Col-lins, L. W. Felder and others.

Miss., Meridian.—Crescent Lumber Co. in-corporated with \$25,000 capital stock by C. E. Myers, J. E. Tart and G. B. Neville.

N. C., Statesville,-Statesville Lumber Co. will rebuild plant recently reported burned; machinery ordered.

Okla., Snyder. — Herring-Parsons Lumber Co. incorporated with \$15,000 capital stock by S. W. Parsons of Snyder, L. K. Johnson and A. R. Cotton of Vernon, Tex. Tex., San Antonio.—National Building &

Investment Co. contemplates instailing saw-

W. Va., Beckley.—Mankin & Crouch pur based timber lands on Batoff Mountain, ac chased timber lands on Batoff Mountain, ad-ditional to 2500 acres recently purchased at

METAL-WORKING PLANTS

Okla., Ardmore—Egg Crates.—Bigham & Reed Manufacturing Co. (recently reported incorporated with \$10,000 capital stock by R. A. White and others) will manufacture galvanized iron egg crate.

MINING

Ark., Camden—Clay.—National Druggists' Syndicate, Thomas G. Beattle, president, Chi-cago, 111., contemplates purchasing for de-velopment 1000 acres near Camden on which are clay deposits said to contain medicinal qualities and kaolin, fire and vitrified brick clay; planned to organize company with £56,000 capital stock to develop medicinal products and subsidiary company to develop commercial products.

commercial products.

Ga., Stone Mountain—Granite, etc.—Stone Mountain Granite Corporation incorporated with \$150,000 capital stock by Albert Weibler, Geo. J. Glover and Paul Johnche, all of New Orleans, La.; leased marble and granite quarries for 40 years and will develop; quarry is 700 feet high and 700 feet in circumference; will also increase capacity of marble works at New Orleans, La.

Ga. Stone Mountain—Marble and Granite. Albert Welblen, New Orleans, La., leased marble and granite quarries for 40 years and will develop; quarry is 700 feet high and 700 feet in circumference; proposes to organize company to handle output; will also increase capacity of marble works at New Ocleans, La.

Jr., general engineer of Virginia-Kentucky Fuel Co., 530 Union Trust Bidg., Cincinnati, O., has sunk shaft 125 feet; will continue shaft and arrange to install machinery. (Lately mentioned.)

Mo., Seneca.—Lion Mining & Milling Co., F. V. Wasserman, president (recently noted to build 106-ton mill), will open bids Septem-ber 15 for machinery; has 40 acres of lead and zine property. (See "Machinery Wanted.")

Mo., St. Louis-Zinc.-Bangor Zinc Mining & Smelting Co. incorporated with \$30,000 capital stock by C. W. Dice, Gustave A. Robyn, John Ferris and others,

Okla., Javis.—Silver King Mining & Milling Co. incorporated with \$30,000 capital stock by R. H. Law of Davis; J. J. Eaves, Pooleville, Okla.; R. Ross and H. L. Baker, Homer, Okla.

Tenn., Chilhowee—Iron.—Chilhowee Mountain Mining & Manufacturing Co. will develop 20,000 acres of mining property; date of opening bids for machinery not determined W. Wallace Miller, president, Pittsburg, Pa. W. Wallice Miner, president, Pricsoning, Pa.; F. M. McClenahan, secretary; Robert H. Leiteh, treasurer, Pittsburg, Pa.; main office, Maryville, Tenn. (Previously noted incorporated with \$25,000 capital stock.)

Va., Narrows-Sand.-White Sand Co. in-corporated with \$50,000 capital stock; B. M. Cohen, president, Bluefield, W. Va.; J. G. White, vice-president, Narrows; D. J. Cohen, secretary, Bluefield, W. Va.

MISCELLANEOUS CONSTRUCTION

Ark., Pecan Point—Levee.—St. Francis Levee Board, O. N. Killough, president, Marion, Ark., will expend \$20,000 to construct loop

extend levee at end of system on Atchafalaya Rived below Melville; will also rebuild part of levee at Ela for which bids will be opened

La., Marksville – Levee. – Commissioners Saline Levee Board will enlarge present Red River Levee; F. M. Kerr, State Engineer, New Orleans, La.; will award contract in

La., New Orleans.—Commissioners Orleans Levee District, 201 New Orleans Court Bidg., will receive bids until September 21 for con-struction of pile bulkhead about 1900 feet long between Egania and Alabo Sts.; Jules C. Koenig, president of Board. (See "Ma-chinery Wanted.")

La., New Orleans—Levee.—Board of State Engineers will recommend acceptance of following bids for levee work: Luman Bros. at 32 cents per cubic yard, Biggs levee, in Madlson parish, raising and enlarging, contents 90,000 yards; W. T. & E. M. Lawrence at 35 cents per cubic yard. Reid levee, Madison parish, raising and enlarging, contents 75,000 cubic yards; George R. Lacey & Co. at 23,50 cents per cubic yard, Upper Lucca levee, Desha county, Arkansas, raising and enlarging, contents 50,000 cubic yards; Donovan & Daly, Lake Providence, La., at 31,50 cents per cubic yard, Kempe levee, Tensas parish, raising and enlarging, contents 60,000 cubic yards; W. M. Rushing, Bayou Current, La., at 13,50 cents per cubic yard, Carolina levee, Bossier parish, new levee, contents 75,000 cubic yards. La., New Orleans-Levee.-Board of 8

Md., Baltimore—Wharf.—Baltimore Pearl Hominy Co., 417 N. Howard St., will con-struct concrete wharf.

Md., Cumberland - Subway. - Baltimore &

Ala., Gadsden — Garage.—W. G. Bellinger vill erect addition to garage on Court St.; crick; front for office; rear for automobile

Fig., Boca Grande—Elevator and Storage Bins.—Charlotte Harbor & Northern Railway, L. M. Fouts, general manager, contemplates doubling capacity of phosphate elevator and coal storage bins at South Boca Grande.

Fla., Jackschville-Garage,-David A. Leon awarded contract to erect garage, etc. (Sec. Tiwellings.")

Fla., Tampa-Oil Distributing.-Gulf Refin ing Co., Frick Bidg, Annex, Pittsburg, Pa. will not creet oil-distributing plant as re-cently reported.

Ga., Lagrange — Poultry Farm. — Southern Poultry Co. organized by W. L. Cleaveland and H. H. Wadsworth, Waynesville, O.; ac-quired 27 acres of land.

Ky., Owensboro-Grain Elevator. - Home Warehouse Co. will erect grain elevator; will incorporate separate company with \$15,000 capital stock.

Ky., Whitesburg—Publishing.—East Ken-tucky Publishing Co. (recently reported in-corporated with \$2000 capital stock) will publish newspaper; machinery mainly pur-chased; W. M. Hall, president; W. E. Cook, vice-president; Nathaniei Hale, secretary-treasurer. (See "Machinery Wanted.")

La., Lake Charles—Laundry.—Lake Side Steam Laundry Co., J. H. Huston, president (recently noted as planning to increase capital stock to \$15,000), has purchased additional machinery for plant; will install dynamo for lighting, and heating hand irons. (See "Machinery Wanted.")

Md., Baltimore — Garage, — Monumental Brewing Co., 3900 E. Lombard St., will erect garage. (See "Miscellaneous Factories,")

Md., Baltimore—Engineering.—Consolidated Engineering Co. incorporated with \$50,000 capital stock; F. Marion Hall, president; Edwin W. Wells, vice-president, 501 Fidelity Bidg., and Charles A. Cummins, treasurer and general manager; offices on second floor Emerson Tower Bldg.

Md., Baltimore — Garage, — Monumental Brewing Co., Lombard and 7th Sts., will erect garage, etc. (See "Miscellaneous Fac-tories")

Md., Frederick—Garage.—Grayson H. Staley, Samuel G. Duvall, Elias B. Ramsburg and others contemplate erection of fireproof

Miss., Greenville—Lumber, etc. — Planters Lumber Co. will be organized by J. L. Strick-land and associates; deal in lumber, lime, cement, etc. (See "Machinery Wanted.")

cement, etc. (See "Machinery Wanted.")
Miss., Natchez-Garage.—Adams Garage Co.
incorporated with \$10,000 capital stock by E.
A. Enochs, W. A. Adams and others.
Miss., Vicksburg—Stock Farm.—Chickasaw
Stock Farm incorporated with \$16,000 capital
stock by W. F. Carroll, E. C. Carroll, Jr.,
and E. H. Magruder.

Mo., Kansas City—Construction.—List-Gil-ford-Hallett Construction Co. incorporated with \$12,000 capital stock by W. H. List, C. J. Brown and F. A. Crouch.

J. Brown and F. A. Crouch.

Mo., St. Louis — Grain Elevator.—Saxony
Mills awarded contract to MacDonald Enginering Co., Chicago, Ill., to crect grain elevator; storage to be divided into 17 rectangular bins ranging in capacity from 1500
to 8000 bushels; to be equipped for receiving
grain from each track on sides of building
in automatic scales of 1800 bushels capacity;
construction begun construction begun.

N. C., Raleigh-Publishing,-Times Publish N. C., Rategar-Publishing,—Fines Publishing Co. Incorporated with \$50,000 capital stock by John A. Park, C. B. Park, Mrs. Lily P. Park and Mrs. 8. H. Farabee; purchased and will continue Raleigh Daily Times; John A. Park is president.

N. C., Winston-Salem.—Garage.—P. N. Montague, 131 S. Cherry St., awarded contract to Fogle Bros. Company of Winston-Salem to erect garage; 108189 feet; mill construction; fireproof; suspended roof; repair shop equipment operated by electric motors; plans by D. Hall Crews, Winston-Salem, N. C. (Recently mentioned). cently mentioned.)

Okla., Lawton-Building. — Benbow-Horton Building Co. Incorporated with \$100,000 capi-tal stock by P. T. and D. W. Benbow, J. A.

tal stock by P. T. and D. W. Benbow, J. A. Horton and G. R. Mosher.

S. C., Allendale — Publishing. — Allendale Publishing Co. Incorporated with \$2000 capital stock by F. Earle Bradham and Quincy bearing.

S. C., Lake City—Live Stock, etc.—J. M.
Truluck Company incorporated with \$25,000
capital stock; J. M. Truluck, president; L.
R. Truluck, vice-president; H. F. Fenegan,
secretary; Joseph M. Eaddy, treasurer.

Tenn., Chattanooga-Printing.-Star Box &

levee to contain about 100,000 cubic yards; B. G. Covington, chief engineer, 288 Randolph Bildg., Memphis, Tenn. (See "Machinery Wanted.")

Daily Bulletin.

ing medium.

ery Wanted.")

D. C., Washington—Wharf.—District of Columbia will construct sand and gravel wharf at foot of 9th St.; 100 feet long, with 125 foot frontage; cost \$16,599. Address Commissioners, District of Columbia.

Ga., Macon-Underpass.-Central of Geor Ga., Macon-Underpass,—Central of Georgia Railway (C. K. Lawrence, chief engineer, Savannah, Ga.), Southern Railway (B. Herman, chief engineer, 1390 Pennsylvania Ave. N. W., Washington, D. C.) and Georgia Southern & Florida Railway (W. C. Shaw, Jr., chief engineer, Macon) are reported as to construct underpass on Bay St. at cost of \$72,000.

Ky., Henderson — Lock and Dam. — Ohlo River Construction Co., Evansville, Ind., submitted bid at \$1,397,400.30 for construc-tion of lock and dam No. 48, Ohlo River, six niles below Henderson; Lytle Brown, Cap-tain, Engineers. (Call for bids lately noted.)

Ky., Maysville.—Maysville Street Railway
Co. awarded contract to R. M. Wallingford
& Son to fill ravine between Varmel St. and
Dieterich's Grove, eliminating trestle now
in use; will require about 8000 cubic yards of dirt.

tract to R. J. Montague to construct public wharf on Vermilion River opposite foot of Lafayette St.

Kentucky-Lead and Zinc.-American Ziuc, Lead & Smelting Co., care of J. C. Wheeler, chafalaya and Bayou Boeuf Levee Board will

Obio Railroad awarded contract to P. Far-rell, Cincinnati, O., to construct subway at Harrison St. crossing; 7 feet wide by 9 feet high: electric lighting; cost \$26,000. (Re-cently mentioned under "Bridges, Culverts,

cently mentioned under "Bridges, Culverts, Viaducts, etc.")

8. C., Charleston—Dredging.—Government will dredge canal between Charleston and McClellanville, S. C.; bids received until October 12; C. P. Howell, Major, Engineers, (See "Machinery Wanted.")

(See "Machinery Wanted.")

8. C., Charleston-Wharf,—Accommodation Wharf & Warchouse Co. will rebuild wharf damaged by storm; contract awarded.

Tex., Port Arthur-Pleasure Pler,—Port Arthur Pleasure Pier Co. awarded contract to A. M. Blodgett Construction Co., Kansas City, Mo., at \$42,800 to construct concrete revetment work of timber and concrete revetted pleasure pier and causway; work calls for retaining walls for island in lake \$60 feet square and causeway 3000 feet long; blds for drawbridge across Sablue-Neches Canal, earthen fill and superstructure will be invited later. (Call for blds lately noted.)

Tex., Texas City-Pier.—Texas City Pas-

Tex., Texas City-Pier.—Texas City Passenger Pier Co. incorporated with \$15,000 rapital stock by E. B. Gray, H. A. Thomas, H. B. Moore and others.

MISCELLANEOUS ENTERPRISES

Ala., Birmingham—Paving.—McCartin Paving & Construction Co, incorporated with 310,000 capital stock; John M. McCartin, president and general manager; J. P. Mc-

Printing Co. increased capital stock from \$30,000 to \$50,000.

Tenn., Rowah—Steam Laundry.—Scott & Morrison will establish steam laundry; construction begun; estimated cost \$10,000.

Tenn., Greeneville—Stock and Food.—Union Stock & Food Co. Incorporated with \$15,000 cepital stock by J. J. Mitchell, C. A. Vann, W. H. Hawkins and others.

Tenn., Maryville.—J. H. Webb Co. incorporated with \$25,000 capital stock by A. K. Harper, T. N. Brown, A. J. Fisher, J. N. Badgett and J. H. Webb.

Tenn., Memphis—Engineering.—Dixie Engineering Co. Incorporated with \$4500 capital stock by Walter Goodman, T. M. Galbreath, W. G. Kay and J. H. Sullivan,

Tenn., Memphis-Building.—Currie-McGraw Building Co. incorporated with \$85,000 capital stock by C. T. McCraw, E. A. Moore, Jesse Currie, B. J. Campbell and J. P. Bullington.

Tex., Austin-Garage.—James H. Robertson will erect garage; one story; brick; cost \$5000.

Tex., Beaumont — Steamship Line. — Seaboard & Gulf Steamship Co. Incorporated with \$1,000,000 capital stock to operate steamship line between New York, Baltimore, Port Arthur and Galveston.

Tex., Clarksville—Hardware, ete.—F. F. Marable Hardware Co. has 75x29o-foot building, and will deal in general hardware, wagons, buggles, etc.; F. F. Marable, president; B. F. Marable, vice-president; E. McClinton, secretary; J. R. Latimer, treasurer. (Recently reported incorporated with \$40,000 capital stock.)

Tex., El Paso-Garage.-W. H. Brophy will

etect garage; cost \$5000.

Tex., Houston—Dental Supplies.—Pendleton & Arts Dental Supply Co. Incorporated with \$10,000 capital stock by Frank S. Pendleton, Frederick C. Arts and William H. Gibbon,

Va., Herndon-Dairy.-Wm. Eads Miller Company contemplates establishment of dairy and ice plant. (See "Machinery Wanted.")

Va., Norfolk-Wave Motor.-International Wave Motor Co. Incorporated with \$300,000 capital stock: W. F. Kelley, president, Norfolk: B. F. Edwards, secretary and treasurer, Washington, D. C.

W. Va., Bluefield—Engineering.—Southern Engineering-Equipment Co. Incorporated by S. H. Meem, C. E. Stuart, J. G. Sale and others; offices in Fidelity Bdg.

W. Va., Clarksburg—Publishing.—H. R. Fish Publishing Co. Incorporated with 45000 capital stock by H. R. Fish, M. D. Helmick, L. C. Queer, A. B. Howard and A. B. Fish.

W. Va., Huntington—Decorating.—The Devol-Craig Company incorporated with \$10,000 capital stock by Elmer C. Craig, Eva G. Craig, E. E. Devol, Jeanett S. Devol and

MISCELLANEOUS FACTORIES

Ark., Harrison—Syrup Pitcher.—Company has been organized with \$25,000 capital stock to manufacture patented non-dripping syrup pitcher; F. R. Mitchell, president; John Davis, vice-president.

D. C., Washington — Candy. — Associated Candy Stores Co. incorporated with \$300,000 capital stock by William A. Easterday and Robert H. Muir; S. A. Terry, 1416 F St. N. W., is attorney.

Fla., Jacksonville — Brooms. — Merchants' Broom Co., P. G. Russell, president, contemplates erection of factory building and warehouse; will need building material. (See "Machinery Wanted.")

Ga., Atlanta—Beverages.—Ulaca Beverage Co. Incorporated with \$5000 capital stock by B. B. Braswell, H. A. Pitner of Atlanta and W. H. T. Gillespie of Bank county.

Ga., Atlanta — Machinery.—De Marco-Fulford Company incorporated with \$10,000 capital stock by F. L. De Marco, J. H. Fulford and F. L. Sawyer.

Gn., Atlanta — Ice-cream, etc. — Blue Seal Ice-Cream Co., G. Alger, manager, 23 Peters St., will open bids September 15 to erect plant to manufacture ice-cream, candy, etc.; 75x75 feet; three stories; ferro-concrete construction; brick; daily capacity, 1000 gallons ice-cream and 3000 pounds candy; cost \$25,000; plans by J. Murphy, Atlanta; also install 30-ton refrigerating plant; cost of machinery, \$50,000; bids closed.

Ga., Atlanta — Monuments. — Consumers' Monument Co. Incorporated with \$50,000 capital stock by W. H. Anderson and C. W. Grover of Cherokee county and Z. D. Harrison of Dekalb county.

Ga., Cedartown — Trucks and Wheels. — Noiseless Wheel & Truck Co., C. B. Morris, manager, is proceeding with construction of 60x120-foot building; wood construction; day labor; machinery purchased. (Recently noted organized with \$100,000 capital stock.)

Ga., Stone Mountain — Marble. — Albert Weiblen will increase capacity of marble works. (See "Mining," Ga., Stone Mountain.)

La., Franklinton-Creamery.—Harry D. Wilson, Roseland, La., and others are interested in establishment of creamery.

Md., Baltimore—Distillery.—Loreley Distilling Co. Incorporated with \$50,000 capital stock by Moses Kaufman, 806 Newington Ave.; John Auen, Jr., and A. Elliott McCormick, both of New York.

Md., Baltimore — Potash. — Spar Chemical Co. plans to install plant to manufacture potash from feldspar by patented process; is negotiating lease on 10 acres of old quarantine property; company recently reported incorporated with \$60,000 capital stock by Harry E. Gilbert, 201 N. Charles St., and associates. (Mr. Gilbert previously mentioned to establish feldspar factory.)

Md., Baltimore—Signs.—Monumental Brewing Co., 3900 E. Lombard St., purchased properties 3909-3913 E. Lombard St., being 44x100 feet, and will erect brewhouse and garage; former 110x90 feet, three stories; garage 10x75 feet, one story; cost \$150,000; plans by Otto C. Wolf, Philadelphia, Pa.; will open machinery bids October 1. (See "Machinery Wanted.")

Md., Havre de Grace—Shirts, Overalls, etc. Harry Rubenstone will begin operation of recently-noted plant about September 20; is now Installing 50 sewing machines; will purchase and install 50 additional machines.

Mo., Kansas City—Electric Trucks.—Electric Truck Co. Incorporated with \$2000 capital stock by John M. Egan, Louis H. Egan and J. A. Harder.

Mo., St. Louis-Glass.-Mississippi Glass Co. will erect machine shop; one story; cost \$6200.

Mo., St. Louis—Automobile Brake.—Lawrence Automobile Brake Co. incorporated with \$2000 capital stock by R. E. Bolen, Virgil Lantz and W. O. Sonum.

Mo., St. Louis — Automobiles. — Cherokee Automobile Co. Incorporated by Eugene Huber, William Paffrath, H. G. Schneider and William Winkler.

Mo., St. Louis — Tools. — Matthews-Davis Tool Co. awarded contract to Murch Bros. Construction Co. to erect tool factory; two stories; 42x125 feet; mill construction; steam heat; electric lighting; freight elevator; cost \$25,000; plans by H. W. Powers, St. Louis. (Previously noted.)

Mo., St. Louis-Brewery.-William J. Lemp Brewing Co. will erect stockhouse; seven stories; fireproof; cost \$78,000.

N. C., Roanoke Rapids—Pulp and Paper.— Halfax Paper Corporation, Paul G. Hough, president, Box 1034, Richmond, Va., purchased plant of Roanoke Rapids Paper Monufacturing Co.; previously noted chartered (under "Va., Richmond") with \$300,000 capital stock to manufacture wood fiber and pulp.

Okia., Okiahoma City—Biscuits.—Iten Biscuit Co. of Clinton, Iowa, and Omaha, Neb., will soon receive bids to erect biscuit plant; building to be five stories and basement; reinforced concrete and brick; 150x150 feet; cost about \$150,000. (Previously noted.)

S. C., Greenville — Underwear. — Gilreath Manufacturing Co. will erect and equip building to manufacture underwear, doubling capacity of present plant; structure will be of brick, slow-burning mill construction; two stories and basement under portion; first floor for offices, stockrooms and cutting department; second floor for manufacturing and basement for storage; size 35x200 feet; cost \$15,000; install steam heat and sprinkler system (contracts not let); general contract awarded to Fiske-Carter Construction Co., Worcester, Mass., Southern office, Greenville; machinery contract placed; Lockwood, Green & Co. of 93 Federal St., Boston, Mass., Southern office, Greenville, engineers. (See "Machinery Wanted.")

Tenn., Memphis—Slik and Leather.—American Cotton Hull & Fiber Co., C. H. Reynell, general manager, Charlotte, N. C., will establish plant to manufacture slik and leather by defibrating cottonseed hulls; will install machines of several tons daily capacity; S. Dent of Charlotte will be local manager.

Tex., Dallas-Cones.—Dallas Cone Manufacturing Co. incorporated by H. C. Miller, J. A. Crote and C. H. Miller.

Tex., Dallas—Trunks.—Wilkins Trunk Manufacturing Co. is having plans prepared by Lang & Witchell, Wilson Bidg., Dallas, for trunk factory; three stories; reinforced concrete; fireproof; cost \$35,000.

Tex., Falfurrias-Dairy.-Falfurrias Jersey Dairy Co. incorporated with \$1,000,000 capital stock by Edward C. Lasater, B. F. Henry and J. M. Sanders.

Tex., Houston—Creamery.—Purity Creamery Co. incorporated with \$10,000 capital stock by Charles H. Alvold, Roy O. Bullock and John J. Clark.

Tex., Houston-Grain Shocking.-J. G. Stuart and associates will organize company to manufacture grain-shocking machine.

Va., Charlottesville, — City voted \$26,000 bond issue for extension of municipal gas system; will install gasholder costing \$10,000 and extend mains to Preston Heights, Belmont, Rose Hill, Fifeville, Locust Grove and other points. Address The Mayor. (Recently mentioned.)

Va., Chincoteague — Shipbuliding, etc. — Conant Bros. Company incorporated with \$25,000 capital stock; W. N. Conant, president; H. W. Conant, secretary and treasurer, all of Chincoteague, Va.; will manufacture ships and deal in boat supplies. (See "Machinery Wanted.")

Va., New Castle—Poultry and Stock Remedy.—Sixeas Poultry & Stock Remedies Coincorporated with \$40,000 capital stock; George Sixeas, president; G. W. Layman vice-president; J. P. Jones, secretary; H. W. Yoder, trensurer; will erect \$10,000 building; ordinary construction; date of opening bids not determined; cost of machinery, \$5000.

Va., Richmond—Electric Lock Strike.—H. F. Smith's Electric Lock Strike incorporated with \$50,000 capital stock; H. F. Smith, president; George J. Hooper, vice-president; J. S. Hopkins, secretary and treasurer.

W. Va., Wheeling-Glass.—Hazel-Atlas Glass Co. voted to increase capital stock from \$2,000,000 to \$3,000,000; will install additional bottle machines. (Recently mentioned.)

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fla., Arcadia.—Charlotte Harbor & North ern Rallway, L. M. Fouts, general manager Boca Graude, Fla., will, it is reported, double capacity of shops.

ROAD AND STREET WORK

Ala., Alabama City.—City will grade and chert Kyle and Forest Aves. Address The

Ala., Anniston.—Calhoun county will grade, drain and surface with chert or macadam about three miles of State Aid Rd.; bids received until October 4; also until same date for grading, draining and macadamizing six miles county road; W. S. Keller, State Highway Engineer. (See "Machinery Wanted.")

Ala., Gadsden.—F. G. Lee, County Surveyor and Engineer, Times-News Bidg., is supervising construction of road connecting Little Mills Valley with Big Mills Valley; will ascend to height of 392 feet from base of mountain; will be one foot higher on lower side than upper side, and will have drainpipes every 500 feet apart; cost \$1898. (Recently noted.)

Ala., Huntsville.—City will construct 1000 feet of asphalt or tarvia macadam pavement recently noted; bids opened September 19; C. D. Phillips, Street Superintendent. (See "Machinery Wanted.")

Ala., Oneonta.—Blount county will grade, drain and surface with chert one mile of State Ald Rd.: bids received until October 3; W. S. Keller, State Highway Engineer. (See "Machinery Wanted.")

Ala., Selma.—City will gravel Lamar St.; cost \$3000; no contract; work by city force; J. L. Clay, Mayor.

Ark., Hot Springs.—City awarded contract to E. J. Wetterstrom, Little Rock, Ark., at \$29,214 to pave Park Ave. for one mile with

Fia., Bradentown.—Manatee County Commissioners awarded following contracts for road construction: From Gillette siding to Union Dock, Terra Ceia, to J. R. Smith & Co., road in Terra Ceia at \$1963.50 per mile, and also one from Lemon Ave., northern boundary of Palmetto, to intersection of road from Ellenton to Gillette, at \$2595 per mile; county is spending total of \$250,000 for road construction.

Fla., Bronson.—Levy County Commissioners postponed election for voting on \$100,000 lond issue for road construction. (Recently mentioned.)

Fla., Jacksonville.—Engineering & Paving Co. of Jacksonville is lowest bidder for paving Bay St. from Market to Bridge St.; 23,368 square yards; Philip Prioleau, City Engineer. (Call for bids lately noted.)

Fia., Bulow.—St. Johns County Commissioners, St. Augustine, Fia., will grade and build road from Bulow, which will be final through Hot Springs township to Tens

liuk in proposed John Anderson boulevard to connect Jacksonville and Miami, Fla.; Volusia county has agreed to construct road from county line to Daytona.

from county line to Daytona.

Fla., Tampa.—City awarded contract to R
L. Davis to construct sheet-cement side
walks; D. B. McKay, Mayor. (Call for bids
lately noted.)

Gr., Cedartown.—City will construct about 5000 feet of cement curb and gutter; bids received until October 3; M. D. Russell, Mayor, (See "Machinery Wanted.")

Ga., Cordele.—City contemplates voting on \$100,000 bond issue, to be divided as follows: \$40,000 for paving, \$30,000 for electric-light plant, \$20,000 for extension of water and sewer systems and \$10,000 for school. Address The Mayor. (Recently mentioned.)

Ga., Lagrange.—City will construct coment and tile sidewalks on Broad St. Address The

Ga., Moultrie.—Colquitt county will vote in November on \$200,000 bond issue for road construction. Address County Commissioners,

Ky., Paducah.—City awarded contract to O'Hagan & Lake, 323 Mercantile Block, Aurora, III., at \$995.25 to construct concrete sidewalks, granife curbs and concrete gutters on both sides of Harrison St. from 8th to 12th St., and on Madison St. from 11th to 12th St. (Recently mentioned.)

Ky., Pineville.—City will vote in November on \$15,000 bond issue for completion of street paving. Address The Mayor.

Ky., Pineville.—City will vote on \$15.00 bond issue for macadamizing streets. Address The Mayor.

La., Gretna.—Jefferson parish contemplates construction of 21 miles of shell road; land donated for seven miles. Address Police Jury.

Md., Denton.—Caroline County Commissioners awarded contract to Holt Construction Co., Federalsburg, Md., to complete State highway between Denton and Greensboro; one and five-sixteenths miles of 4-foot 8-inch water-bound macadam; Maryland State Roads Commission, Union Trust Bidg., Baltimore, Md., supervises construction.

Md., Frostburg.—John J. Price and others, street committee, will receive bids until 2 P. M. September 28 for grading and paving about 2000 feet of street. (See "Machinery Wanted.") Mer Nas two cons com twee ties

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Md., Lutherville.—Lutherville Improvement Association, J. Collin Vincent, president, will construct road on Lincoln Ave. and improve sidewalk on Seminary Ave.

Miss., Aberdeen.—Monroe County Supervisors awarded contracts for construction of 50 miles of roads leading into Aberdeen; Phillips & Jordan, Birmingham, Ala., at \$40,000, for grading; Addison Brannin of Aberdeen, at \$25,000, for concrete; Fourth District issued \$100,000 of bonds for building roads from Gibson, Prairie, Muldoon and Strong into Aberdeen.

Miss., Vicksburg.—City awarded contract to Southern Paving Co., local office, Vicksburg, to construct sidewalks on two streets; C. R. Twiss, City Engineer. (Recently noted.)

Mo., Columbia.—Special Road District voted \$100,000 bond issue for road construction; J. A. Hudson, Road Commissioner; John S. Bicknell, City Clerk. (Recently noted.)

Mo., Elsberry.—Hurricane Township Gravel Roads Co. will survey and construct about eight miles of road; material, gravel or crushed rock; cost \$1500. (Recently noted incorporated with \$15,000 capital stock by J. H. Cannon and others.)

N. C., Asheville.—Buncombe County Commissioners awarded contract to J. M. Ramsey and Mr. Copening of Asheville to grade portions of road between Stocksville and Democrat.

N. C., Burlington.—City's street and sidewalk committee receives bids until 3 P. M. September 28 for street improvements recently mentioned; about 20,600 square yards bituminous macadam, 50,000 square yards concrete sidewalks, 5000 linear feet combined concrete curb and gutter, 25,000 cubic yards grading; plans, etc., at offices of J. H. Freeland, Mayor, and of Gilbert C. White, engineer, Charlotte, N. C., and are obtainable from engineer after September 16. (See "Machinery Wanted.")

N. C., Concord.—City awarded contract t John W. Haas, Charlotte, N. C., to con struct 6000 yards cement sidewalks.

N. C., Marshall.—Madison county contemplates road improvements and appointed Benjamin H. Case of Asheville, N. C., to make surveys and estimate cost of construction; road is to be surveyed from Barnard through Hot Springs township to Tennessee

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line, about 15 miles, which will form part of central highway; survey will also be made of road about 17 miles long from Haywood county line through Spring Creek and Roaring Rock townships to Hot Springs; townships will vote on bond issue; amount required for latter work estimated not to exceed \$10,000; Mr. Case will also make surveys in Mars Hill township, where bond issue will be voted on September 16.

N. C., Winston-Salem, — Forsyth Counts.

issae will be voted on september 18.

N. C., Winston-Salem. — Forsyth County
Road Supervisors ordered improvement of
skx main roads; no road to be improved for
more than five miles: W. L. Spoon, engineer,
will be in charge.

with the in enarge,
Okla., Rennington.—City awarded contract
to C. E. Blessing, Hugo, Okla., to construct
220 square feet of cement sidewalk at \$11.40
per square foot; Jesse L. Sipes, Clerk. (Recently noted.)

Okla., Bokchito.—City contemplates pavir additional sidewalks. Address The Mayor.

Okla. Marietta.—Love county will vote September 23 on \$75,000 bond issue for roads and bridges. Address County Commission-

Okla.. Pawhuska.—Big Hill Township Osage county voted \$50,000 bond issue for road improvements. Address County Com-

missioners.

Okla, Tulsa,—Board of Commissioners will receive lids until 9 A. M. September 19 for paring fit streets, avenues and alleys; 125 blocks; 15 miles; E. B. Cline, City Auditor. (See "Machinery, etc., Wanted.")

Tenn... Crossville.— Cumberland county voted July 10 on \$40,000 bond issue for road improvement. Address County Commissioners.

Tenn., Etowah.-City voted \$35,000 bond see for grading streets and constructing sewer system. Address The Mayor. (Recently mentioned.)

Tenn., Johnson City.—City awarded contract to Cleveland (O.) Trinidad Paving Co. at \$53,000 to construct 23,000 yards paving on Watauga Ave. and Roane St., and to George R. Brown of Johnson City at \$6000 to lay guiters. (Recently mentioned.)

tenn. Memphis.—Geo. A. Gowan, president Memphis-to-Bristol Highway Commission, Nashville. Tenn., states that operation of two days' co-operative plan for highway construction has been postponed pending completion of surveys, but will be used between this date and December; many counties passed bond Issues and are constructing roads for this route; in other counties, in addition to co-operative work, county courts and private citizens will complete roads; road is to be 20 feet wide, of which central strip, 12 feet wide, is to be metalled; Atwell Thompson. Jackson. Tenn., has been appointed engineer, and will have charge of road from Nashville to Memphis; another engineer will probably be appointed by National Tepartment of Roads. (Previously mentioned.) Tenn., Memphis.—Geo. A. Gowan, president

mentioned.)

Tenn. Nashville. — Executive Committee, George N. Welch, chairman, Monterey, Tenn., will complete missing links in Tennessee central highway from Nashville to Crossville; proposed to build 22 miles of new road between Monterey and Crossville, seven miles between Monterey and Crossville and two miles west of Cookeville in Putnam county; road is to be graded and metaled.

Tenn. Park, R Station, Knoxville.—City will expend \$15,000 for street improvements; about five miles; T. S. Dooley, Mayor. (Recently mentioned.)

Tex. Farmerswille.—City will soon let con-

Tex., Farmersville.—City will soon let con-tract for street improvement consisting of concrete crossings, culverts and gutters; J. P. Huddleston, Mayor. (See "Machinery

Wanted.")

Tex., Fort Worth.—City will pave E. 8th, Cathoun, Jones and Grove Sts., containing 365, 2165, 2045 and 2045 square yards, respectively; materials to be bitulithic, vitribed brick, rock asphalt or asphaltic concrete; bids received until September 16; F. J. Von Zuben, acting City Engineer. (See "Machinery Wanted.")

Tex., Galveston.-John M. Murch, County Auditor, will receive bids until October 1 for surfacing and shelling roadway over earth part of causeway. (See "Machinery Wanted.")

Tex., Hamlin.—City will macadamize eight blocks; cost about \$80,000; bids will soon be invited. Address P. E. Fraser.

Tex., Houston Heights.-City will vote October 10 on \$180,000 bond issue for street paying. Address The Mayor.

Tex., Marlin.—City awarded contract to Ray McJonald for paving; Henry Seward, engineer: F. T. Heffner, Mayor. (Bond Issue of \$10,000 recently reported voted.)

Tex., McGregor. - McGregor Justice Pre-

Tex., Shepherd.—Precinct No. 2 of San Jacinto county will construct roads. Ad-dress County Commissioners, Coldspring,

Tex., Tilden.-McMullen county voted \$35. 90) bond issue for road improvements. Address County Commissioners. (Recently

Tex., San Antonio.—City contemplates construction of 150,000 square yards of asphalt pavement during year; all work done by city under supervision of City Engineer. (\$12,000 appropriation recently noted.)

appropriation recently noted.)

Tex., Waco.—M. J. McCombs, civil and contracting engineer, Waco, has contract for construction of sidewalks and streets in Highland Pl.; cost \$125,000.

Tex., Wichita Falls. — Precinct No. 1, Wichita county, will vote October 13 on \$150,000 bond issue for macadam roads; D. E. Thomas, Commissioner.

E. Thomas, Commissioner.

Va., Lynchburg.—City will construct 2000 square yards granolithic sidewalks, requiring 1000 cubic yards excavation; bids received until September 16; H. L. Shaner, City Engineer. (See "Machinery Wanted.")

Va., Petersburg.—City is considering \$150,000 bond issue for street improvements and extension of sewer and water systems. Address The Mayor.

Va., Portsmouth. — Street committee in-structed City Engineer to prepare estimates on cost of paving sidewalks on one side of Ann 8t. from Cooke to Butler St.

W. Va., Follansbee.—City awarded contract to Craig & Co. to pave streets; \$17,000 bond issue voted. (Recently mentioned.)

W. Va., Fayetteville.—City awarded conditional contract to G. L. Pence, St. Albans, W. Va., at \$11,300 to construct concrete or ce ment sidewalks; 2417 linear feet, 5 feet wide; 1836 linear feet, 4½ feet wide; 5421 linear feet, 4 feet wide; 2175 linear feet, 3½ feet wide; 3224 linear feet, 3 feet wide; R. H. Dickinson, Mayor. (Call for bids lately

W. Va., Huntington.-City will pave Buffington, 31st and 2d Sts. and three alleys with vitrified brick; bids received until October 5; John Coon, Commissioner of Streets, etc.; A. B. Maupin, City Engineer. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Bessemer.—City awarded contract to C. M. Burkhalter, Birmingham, Ala., to ex-tend sewer through Clarendon and Dart-mouth Aves. to 24th St.

mouth Aves. to 24th St.

Ala., Montgomery.—City defeated \$50,000 bond issue for sanitary sewer construction.

Address The Mayor. (Recently mentioned.)

Fla., New Smyrna.—A. D. P. Smith states committee has not been appointed to promote sewer construction; arrangement of bond issue contemplated. (See "Electric Plants")

Fla., Tampa. — City will lay eight-inch sewer on Twiggs St.; awarded contract to Bomford Plumbing Co.; D. B. McKay,

Ga., Cordele.—City contemplates voting on \$20,000 bond issue for extension of sewer and water systems. Address The Mayor. (See "Road and Street Work.")

Ga., Newnan.—Water and Light Commission, W. B. Pringle, secretary, will receive bids until September 27 for construction of proposed sewer lines and water mains. (See 'Machinery Wanted.")

"Machinery Wanted.")
Ga., Summerville, at Augusta. — Village
Council, A. Cuthbert, intendant, receives bids
until 12 M. September 30 for construction of
proposed sewers; above 10,000 feet 24, 18, 15,
10, 8 and 6-inch pipe; plans and specifications at village hall and at office of Geo. W. Summers, engineer, 412 Dyer Bldg., Augusta. (See "Machinery Wanted.")

(See "Machinery Wanted.)

Ga., Winder.—City awarded contract to
Sullivan, Long & Haggerty, Bessemer, Ala.,
at \$29,950 to construct sewer system; J. B.
McCrary Company, engineer, 1311 Empire Bldg., Atlanta, Ga.

La., Charles.—City postponed date of open-ing bids from September 11 to September 18 for construction of 27 miles of sewers re-cently noted; Walter G. Kirkpatrick, engi-neer, Jackson, Miss. (See "Machinery

neering Department of District of Columbia, Washington, D. C.

Md., Baltimore.—City awarded contract to M. J. Beach, 809 American Bldg., Baltimore, to construct storm-water sewers, contract No. 15; work will include 965 feet 15 to 24-inch drains, 370 feet 12 and 15-inch inlet conections, etc. (Call for bids lately noted.)

nections, etc. (Call for bids lately noted.)
Miss., Clarksdale,—City awarded contract
to J. C. Mishler, Chattanooga, Tenn., to extend sewer system into Dolan, Oakhurst and
Myrtle Hall, suburbs of Clarksdale; contracts for machinery and supplies also
awarded. (See "Water-works.")

N. C., Wilmington.—City Council adopted resolutions to purchase plant of Wilmington Sewer Co. and incorporate in enlarged mu-nicipal system; C. R. Humphreys, City En-gineer. (Previously mentioned.)

8. C., Kingstree.—City will vote on bond sale for construction of sewer system. Address The Mayor.

Tenn., Etowah.—City voted \$35,000 bond issue for constructing sewer system and grading streets. Address The Mayor. (Recently mentioned.)

Tenn., Nashville.—City awarded contract to LeSueur & Co. at \$3447 to construct sewer in Eighteenth Ave.

Tenn., St. Elmo.—City will vote September 19 on \$80,000 bond issue for sewer construc-tion; W. G. M. Thomas, R. L. Davis, S. Barton Strang, Commissioners of Election.

Tex., Dallas.—City will construct system of storm sewers in South Dallas; 15 to 80 inches in diameter; distance 9500 feet; esti-mated cost \$35,000; J. M. Preston, City En-

Va., Petersburg.—City is considering \$150,-000 bond issue for extension of sewer system, etc. Address The Mayor. (See "Road and Street Work.")

Va., Staunton. - City contemplates con-struction of sewer system. Address The

W. Va., Huntington.—City will construct 10 and 12-inch tile sewers in alleys; bids re-ceived until October 5; John Coon, Commis-sioner of Streets, etc.; A. B. Maupin, City Engineer. (See "Machinery Wanted.")

TELEPHONE SYSTEMS

La., Shreveport.—Cumberland Telephone & Telegraph Co. (executive office, Nashville, Tenn.) will, it is reported, expend \$290,000 for improvements, including placing all wires underground in business district. Ben S. Read. New Orleans, La., is district superin-

N.C., Walkertown.—Walkertown Telephone Co. incorporated with \$5000 capital stock by J. C. Hammock and others.

Tenn., Dyersburg.—Home Telephone Co. will install telephone exchange; building eased; telephone system in course of construction.

Tenn., Elizabethton.-East Tennessee Teleohone Co. will construct telephone exchange; construction begun; J. J. Veach, district nanager, is in charge.

Tex., Roxton.—Roxton Independent Telephone Exchange incorporated with \$9000 capital stock by McD. High, Brooks Ware and W. J. Bradshaw.

TEXTILE MILLS

Mo., St. Louis-Bleach and Finish,-Walter H. Carter, American Hotel, will establish plant to bleach and finish textile goods. (Re-cently mentioned.)

N. C., Rockingham—Plaids and Shirtings,— Pee Dee Manufacturing Co, will remove 70 old looms and install 70 new ones.

N. C., High Point-Hoslery.—Ebony Mills Co. incorporated with authorized capital stock of \$125,000 to establish plant for manu-Philip T. Goodwin, J. H. Adams and Samuel B. Keen of New Orleans, La., and J. E. Mills, High Point.

S. C., Dillon-Cotton Yarns, Atlantic Mills Corporation is reported as being organized with \$10,000,000 capital stock to combine 12 Wanted.")

La., Monroe.—City's plans for constructing of North and South Carolina; organizers are storm-water conduit include 500 feet of reinforced concrete; 4 feet 6 inches by 4 feet 6

Va.; Wm. M. Hamer of Dillon, Henry M.

Wilson of McColl, S. C.; J. F. Taylor of Kinston, N. C., and others.
S. C., Greenville—Cotton Goods.—Wallace Mills organized with Thomas F. Parker as president and treasurer; T. M. Marchant, vice-president; M. M. Trotter, Jr., secretary. (Reported incorporated last week with \$26,000 capital stock.)

900 capital stock.)

8. C.. Whitmire — Print Cloth,—Glenn-Lowry Manufacturing Co, will erect addition and install 20,000 spindles, 700 booms and necessary carding machinery; structure will be of brick with heavy pine timbers and pine and maple flooring; new equipment will utilize between 20,000 and 40,000 pounds of cotton per week; most of machinery purchased; total cost of improvements \$400,000 to \$500,000; Shand Engineering Co., Columbia, S. C., architect; date of opening bids not determined. (Recently mentioned.)

Tenn., Maryville—Hosiery—Maryville Hos.

Tenn., Maryville—Hosiery.—Maryville Hosiery Mills has begun construction of plant to replace burned one; building 39933 feet; brick construction; cost, without equipment, \$12,000; to install 159 knitting machines; capacity 600 dozen pairs hose; total investment about \$40,000; C. V. Burger, engineer-architect in charge. (Recently mentioned.)

WATER-POWER DEVELOPMENTS

Okla. Okemah.—W. H. Dill (previously noted under "Electric-light Plants" to construct dam to cost \$40,000) is about ready to purchase machinery for electric plant to develop 2000 horse-power; will use turbines or dynamos; hollow concrete dam. (See "Machinery Wanted.")

"Machinery Wanted.")

S. C., Laurens.—Sullivan Power Co. incorporated with capital stock of \$30,000. This company (not Reedy River Power Co., as recently reported) has purchased property at Tumbling Shoals on Reedy River and will develop 800 horse-power; erect concrete power-house and construct 200-foot dam; concrete and wood construction; J. E. Signine of Greenville, S. C., is preparing plans. N. B. Dial is president and treasurer.

W. Va., Cascade.—Preston County Davager.

W. Va., Cascade.-Preston County Develor ment Co. incorporated with \$100,000 capital stock by Roy Clear and D. B. Davis of Cas-cade, Everhart Bierer, Morgantown, W. Va.; C. C. Clear and A. W. Hawley, Masontown, W. V.

WATER-WORKS

Ala., Alabama City.—City contemplates voting on \$46,000 to \$20,000 band issue for construction of water-works and electric-light plant. Address The Mayor.

Ala., Gadsden.—City contemplates construc-tion of reservoir at water-works plant; ca-pacity 4,000,000 gallous of water; pressure of 104 pounds at fire plugs; cost about \$16,000. Address Mayor Bellinger.

Fla., New Smyrna.—A. D. P. Smith states committee has not been appointed to promote water-works construction; arrangement of bond issue contemplated. (See "Electric Plants.")

Flants...)
Ga., Cordele.—City contemplates voting on \$26,000 bond issue for extension of water and sewer systems. Address The Mayor. (See "Road and Street Work.")

Ga., Dalton,-City will build additional filter tank. Address The Mayor.

Ga., Jessup.—City has engaged Arthur Pew, Eastman, Ga., as engineer to prepare plans for water-works recently noted; cost \$25,600; water will be supplied from artesian well; will receive soon bids for well drilling. (See 'Machinery Wanted.")

Ga., Newnan.-Water and Light Commission, W. B. Fringle, secretary, will receive bids until September 27 for proposed waterworks construction. (See "Machinery Want-

Ga., Summerville, at Augusta. — Village Council receives bids until 12 M. September 30 for laying proposed water mains; plans and specifications at village hall and at office of Geo. W. Summers, engineer, 412 Dyer Bidg., Augusta; A. Cuthbert, intendant. (See "Machinery Wanted.")

(See "Machinery Wanted.")

La., Covington.—J. B. Mansfield, 312 Board of Trade, New Orleans, La., manager of New Orleans department of Columbian Iron Works of Chattaneoga, Tenn., recommends water-works construction at cost of \$65,000; to include 33,000 linear feet 6-inch, 3100 linear feet 8-inch, 1210 linear feet 10-inch and 450 linear feet 12-inch cast-fron pipe; 500-gallon compound duplex pump; 1000-gallon underwriters"; two 100-horse-power boilers; 40x80-foot brick pumphouse; 200,000-gallon reservoir; 75,000-gallon tank on 125-foot steel tower; 64 hydrants and 132 valves; combination automobile hose and chemical; hook and ladder truck; 3500 feet underwriter hose with approved labels; bonds contemplated; recommendation submitted to Covington recommendation submitted to Covingto

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Commercial League. (Mr. Mansfield recently mentioned as to make preliminary plans.)

La., Lecompte.-City will extend and Improve water works, Address The Mayor.

Mo., Kirksville.—City will construct waterworks; S. N. Foley, City Engineer, and Hiram Phillips, consulting engineer, Third National Bank Bidg., St. Louis, Mo., will prepare plans; estimated cost \$100,000.

Miss., Clarksdale,—City awarded contract to J. C. Mishler, Chattanooga, Tenn., to extend water-works and sewer systems into bolan, Oakhurst and Myrtle Hall, suburbs of Clarksdale; contracts also awarded for machinery and supplies, consisting of alr compressor and water-works pump, feedwater pump, 53,000 feet of iron pipe and 100 valves and hydrants; total cost about \$60,000. (Call for bids lately noted.)

N. C., Albemarle,—City will install waterworks; Gilbert C. White of Charlotte and Durham, N. C., engineer. Address engineer at Charlotte office.

N. C., Charlotte.—Board of Water Commissioners will make extension to water-works, including 2000 linear feet of 12-inch water mains; bids opened September 14; address Superintendent of Water-Works.

N. C., Murphy.—City awarded contract to A. A. Fain to extend water-works, including two and one-quarter miles of eight-inch main and 16x16xx concrete filter plant; capacity 215,000 gallons; cost \$25,000; Max R. Hall, Atlanta, Ga., engineer in charge; J. V. Brittain, secretary-treasurer. (Recently noted.)

Okla., Butler.—City defeated \$25,000 waterworks bond issue, Address The Mayor. (Recently mentioned.)

Okla., Clinton.—City will vote September 19 on \$29,900 bond issue for drilling artesian well. Address The Mayor.

Okla., Dustin.—City voted \$25,000 bond issue for construction of water-works system. Address The Mayor.

Okla., McAlester-City adopted plans for proposed dam at watershed, and will receive bids until September 20 for construction; W. P. Halliday, City Engineer, (Lately mentioned.)

Okla., McAlester, — City will construct earthern dan and concrete-lined spillway; bids received until September 29; J. M. Gannaway, City Clerk, (See "Machinery Wanted.")

Okla., Muskogee.—City will construct water intake and inlet tower; intake to be 54 Inches in diameter, 2500 feet long, laid across Arkansas River and up bed of Grand River; intake tower to be of concrete and be built at upper end of intake; bids received until September 18; E. H. Fleming, Commissioner of Water, Sewer and Lights; Alexander Petter, consulting engineer, 114 Liberty St., New York. (See "Machinery Wanted.")

Okla., Soper.-City voted \$12,000 bond issu for construction of water-works. Addres The Mayor. (Recently mentioned.)

Okla., Wapancuka.—City votes \$7000 bond issue for extension of water-works. Address The Mayor. (Recently mentioned.)

Okla., Vian.—Board of Trustees awarded contract to Terry Construction Co., Poteau, Okla., at \$17.364 to construct water-works.

Okla., Walter.—City voted \$6500 bond issue for water-works improvements. Address The Mayor.

S. C., Kingstree,-City will vote on bond issue for construction of water-works. Address The Mayor.

Tenn., Jeilico.—Dr. D. W. Moore, Mayor, states specifications are not completed for water-works; call for bids will be advertised. (Recently noted.)

Tenn., Maryville.—City is considering construction of water-works. Address The

Mayor.
Tex., Jourdanton. — Jourdanton Water
Works Co. organized by T. H. Zandersen, T.
L. Richardson, B. B. Daugherty and others.

Tex., Killeen.—City will vote October 18 on \$16,000 bond issue for water-works construction; additional sum to be provided, making \$32,000 available for the work; W. A. Chanslor, Mayor.

Tex., Laredo,—Laredo Water-Works Co. will enlarge water-works and install additional machinery.

Tex., Morgan City.—City contemplates constructing water-works; Xavier A. Kramer, Magnolla, Miss., surveyed city and prepared plans.

Tex., Nocona.—City, Walter Hodges, Mayor, will receive bids until 8 P. M. October 2 on material and equipment for water-works; pumps, engine, 75,000-gallon steel tank and tower, pipe, valves and hydrants; specifications with Fountain-Shaw Engineering Co., 308 Andrews Bidg., Dallas, Tex.; also with Mayor. (Recently noted.)

Tex., Paris.—City voted \$35,000 bond issue for improvement of water-works. Address The Mayor. (Recently mentioned.)

Va., Norfolk.-City will install reservoir pumping equipment at Humpback bridge; specifications furnished by T. B. Dornin of water department; Board of Control invites bids.

Va., Petersburg.—City is considering \$150,000 bond issue for extension of water-works, etc. Address The Mayor. (See "Road and Street Work.")

Va., Williamsburg. — E. W. Warburton states that city is not considering construction of water works as recently reported.

W. Va., Grafton,—City voted \$90,000 bend issue for improvements to water-works. Address The Mayor. (Recently mentioned.)

W. Va., Mannington.—City will vote on \$30,000 bond issue for enlargement and improvement of water-works. Address The Mayor.

WOODWORKING PLANTS

Ala., Brewton — Veneers, — Martin Veneer Co. will operate established plant; W. G. Martin, president; W. P. Martin, vice-president; M. S. Martin, secretary; C. P. Martin, treasurer; daily capacity 125,000 feet of one-eighth-inch stock. (Recently noted incorporated with \$15,000 capital stock.)

Ala., Sheffield-Veneer.-E. D. and K. G. McConnell, Chicago, III., will establish veneer and humber mill.

Fla., Sanford-Crates. - Sanford Manufacturing Co. organized to manufacture crates.

Ky., Louisville-Caskets,-Southern Casket Co. Incorporated with \$10,000 capital stock by John W. Manning, Martha B. Manning and Lena Gilligan.

Ky., Middlesboro—Farm Wagons.—Pinnacle Wagon Manufacturing Co., Cumberland Gap. Tenn., will open bids January 1 to erect wagon factory; ordinary mill construction cost \$5000; cost of machinery \$5000. Address Russell Berkan. (Recently noted at Cumberland Gap. Tenn., as negotiating with Board of Trade relative to building factory.)

Ky., Hickman - Hoops, - Barney & Sides, Rector, Ark., purchased Hickman Lumber & Planing Mill Co.'s plant and will convert into hoop factory.

La., New Orleans—Cooperage.—Peter Gardner Cooperage Co, will rebuild cooperage plant burned at loss of about \$10,000.

N. C., Hickory — Wagons, etc. — Piedmont Wagon Co, reorganized as Piedmont Wagon & Manufacturing Co.; will enlarge business with present plant; no additions at present.

N. C., Lenoir-Building Material, Furniture, etc.-Lenoir Manufacturing Co. Incorporated with \$50,000 capital stock by C. P. Lutz of Lenoir and T. J. and M. L. Lutz, Hudson, N. C.: purchased plant of Lenoir Woodworking Co.

Hudson, N. C.; purchased plant of Lenoir Woodworking Co.
N. C., Wilmington—Crates, Boxes, etc.—
D. D. Routh, Petersburg, Va., contemplates establishing plant to manufacture boxes, erates, etc.

N. C., Wilson-Carriages.-Hackney Bros. purchased 20 acres on which to erect carriage factory

Okla., Tulsa-Excelsior.-Charles Page is interested in establishment of excelsior plant.

Tenn. Chattanooga—Furniture.—Loomis & Hart Furniture Co. (not Loomis & Hart Manufacturing Co., as stated last week) is incorporated to take over the furniture manufacturing department of Loomis & Hart Manufacturing Co.; capital stock, \$200,000; is proceeding with construction of plant; to be operated by electricity; C. H. Ballew of Chicago, Ili., prepared plans and will superintend construction; organization of company not complete.

Tenn., Harriman.—John W. Staples, Room 5 Caldwell Block, contemplates establishment of plant to manufacture 2000 sets loose headings daily. (See "Machinery Wanted.")

Tex., Rusk-Furniture,-Prison Commission, B. E. Cabell, chairman, Huntsville, Tex., opens bids October 7 to erect building to replace burned building; 100x200 feet; cost \$55,000; plans by C. H. Page & Bros., Austin, Tex.; cost of machinery, \$50,000; bids not yet advertised. (Recently noted.)

Va., Burkeville—Cooperage,—Tupelo Cooperage Co. incorporated with \$15,000 capital stock; J. H. Dewees, president, Paoli, Pa.; L. W. Plummer, vice-president, Waverly, Va.; J. L. Bradshaw, treasurer and general manager.

W. Va., Martinsburg — Vehicles. — Stewart Vehicle Co. will erect addition to plant; new building will be 70x60 feet; three stories and basement; brick; plant will have daily capacity of 75 buggles; S. A. Westenhaver of Martinsburg has contract; construction begun.

BURNED

Ala., Albertville.--W. F. Howard's resi-

Ga., Atlanta.-E. 8, Strond's residence, loss \$2500; W. M. Mitcham's residence, loss \$4600.

Aln., Birmingham.—Armour & Co.'s refrigcrating, sausage-making and packing plant estimated loss \$200,000; main offices, Chi-Vago, Ill.

Fla., Fort Meade,—R. C. Langford's store; loss about \$4000.

Fla., Tampa.-D. W. Bullard's residence in Hyde Park.

Ga., Barge.-M. B. Stogmer's store; postoffice; loss \$5000,

Ga., Hawkinsville.—Anderson Bros. & Co.'s wacehouse; loss \$25,000.

Ky., Franklin.—Franklin Woolen Mills Co.'s plant; estimated loss, \$50,000.

Ky., Scottsville,—Meador & Mottley's store Scottsville Citizen's plant; Garrison Furniture Co.'s store; Crow Undertaking Co.'s establishment; Tibibs Carpentor's residence; Carver Hotel; Howell & Sears' store; Presisyterian chuch; K. J. Gibbs' residence; Rev. Andrew Howell's residence; loss about \$50,000.

La., New Orleans.—Peter Gardner Cooperage Co.'s plant; loss about \$10,000.

Md., Cumberland.—Alleghany Grove Hotel at Alleghany Grove, owned by Alleghany Grove Improvement Co.; loss \$5000.

Miss., Liberty.—E. H. Westbrook's cotton gin.

Mo., Kirkwood.—Fred P. Fackbauer's residence on Elm Ave., between Kirkwood and Webster Groves, Mo.; loss \$8000.

N. C., Lincolnton.-J. P. Finger & Bro.'s bundle factory; estimated loss \$15,000. N. C., Newbern.-S. E. Sullivan's lumber

plant.
Okla., Aline.—McCully Bros.' hardware es-

tablishment.
Tex., Bartlett.-Bartlett Marble Works;

Tex., Bartlett.—Bartlett Marble Works; oss \$4000; S. P. Tucker, owner. Okla., Oklahoma City.—R. M. McAlester's two dwellings at Packingtown and adjoining dwelling; total loss about \$20,000.

Tex., Red Oak.-White Gin Co.'s plant

Tex., Buda.- Barber & Barton's cotton giu

Tex., Decatur.—Decatur Water & Light Co.'s electric-light and power plant; loss about \$6000.

Tex., Greenville.—Hunt County Fair Assoclation's 54 stalls, two horse barns and hog and cow barns; total loss \$500.

Tex., Lisbon.—Lisbon Gin Co.'s plant; $\rm loss$ about $\rm \$8000$

Tex., McAllen. — Monitor Printing $\mathfrak{C}_{0,3}$ plant,

Tex., Mt. Pleasant,—John J. Reeves' $_{\rm regl}$ dence; loss \$3000,

Tex., Red Oak.—Citizens' Cotton (6] Co.'s cotton gin; loss about \$5000.

Tex., Terrell.—H. C. Ryan's residence; loss

Noot,
Tex., Terrell.-H. C. Ryan's residence : loss

75000.
Tex., Cleburne,—Cleburne canning factory, owned by W. E. Watts and Jeff Beasley; loss about \$10,000.

loss about \$10,000.

Tex., Palestine. — International & Great Northern Railrond's machine shops; loss about \$7500; O. H. Crittenden, consulting en-

gineer, Pulestine, Tex.

Tex., Saltillo.—National Lumber Co.'s hardwood nill: loss \$10,000.

Z. Spearman containing office of Sun Pullishing Co., printing plant, etc.

Tex., Waelder.-M. T. Flowers' cotton gin; loss about \$7000.

Va., Big Stone Gap.—Colored Presbyterian Church. Address The Pastor, Colored Presbyterian Church.

W. Va., Benwood.—Phillip Klmberly's residence; Rev. Mr. Davis' residence; William Raper's residence.

W. Va., Keyser.—Potomac Building & Ice Co.'s plant; Keyser Milling Co.'s plant; loss about \$40,000. Mo tion Pyle

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BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ga., Atlanta.—Dr. H. F. Scott will erect store and apartment building. (See "Stores.")

Ga., Atlanta.—Dr. 11. F. Scott, 24 Peachtree St., contemplates erection of apartment and store building; five stores on ground floor; 101x140 feet; cost \$40,000; architect not selected.

Ga., Atlanta.—Williams-Hartsock Company, \$67 Fourth National Bank Bldg., will erect apartment-house at 300 W. Peachtree St.; cost \$21,000; building will contain four 6room apartments; brick veneer; steam heat; electric lighting; freight elevator. (See "Machinery Wanted.")

Md., Baltimore.—Herman Scherr, 829 Equitable Bldg., has plans by H. J. Tinley, 314 N. Charles St., Baltimore, for apartmenthouse at Whitelock St. and Park Front; three stories; brick; 20x34 feet; cost \$30,000.

Mo., Kansas City.—C. T. Rayston will erect apartment-house; cost \$5000. Mo., Kansas City.—A. Elberfield will not at present erect apartment-house. (Recently

present erect apartment-house. (Recently noted.)

Mo., Kansas City.—Max Klein will erect

apartment-house; brick; cost \$4000.

Mo., Kansas City.—Nealy West will erect apartment-house; brick; cost \$11,000.

Mo., Kansas Clty.—R. A. Boutross will erect apartment-house; brick; cost \$4000.

Tenn., Chattanooga.—Dr. A. W. Boyd has plans by Huntington & Sears, Chattanooga, for apartment-house on Sidney St.; brick; 16 three-room apartments; cost \$110,000.

Teun., Memphis.—E. R. Parham & Co. contemplates erection of apartment-house; six stories; four, five and six-room suites; fire-proof construction; built-in sanitary tee boxes; vacuum cleaner equipment; 60 apartments; 60x140 feet; cost about \$150,000; plans by S. J. Weigal, Memphis.

Tex., Houston.—P. C. Roberts will creet

Tex., Houston.—P. C. Roberts will erect store and apartment-house. (See "Stores.") Tex., San Antonio.—National Building &

Tex., San Antonio.—National Building & Investment Co. plans erection of three apartment-houses.

ASSOCIATION AND FRATERNAL

Ala., Birmingham.-Loyal Order of Moose will erect lodge building.

BANK AND OFFICE

Fla., Tampa.—Citizens' Bank & Trust Co. has plans by Jos. C. Llewellyn, FirstNational Bank Bidg., Tampa, for proposed bank and office building; 10 stories; brick and stone; cost several hundred thousand dollars; Francis J. Kennard, architect, Tampa, is receiving bids for construction.

Ga., Augusta.—William A. Healey is reported as having plans by Morgan & Dillon. Atlanta. for proposed store and office building on Forsyth St.; 22 stories; double arcade; stores on lower floor; offices above.

Ga., Atlanta.—Southern Development Cowill open bids about December I to erect office building for physicians and dentists: 109X100 feet; fireproof construction; steam heat; six electric elevators; cost \$500,000; plans by King & Walker, 103 Park Ave., New York, and 90 Forsythe St., Atlanta; architects may be addressed. (Recently noted.)

Md., Baltimore.—Webb & White, Maryland Telephone Bldg., will erect office building; bungalow style.

Miss., Lucedale.—I. H. Weaver is having plans prepared by Slater & McCrary, Mobile. Ala., for store, bank and office building: two stories; brick; lower floor for store and bank; upper floor for 16 offices; cost \$12.99.

Mo., Springfield.—F. X. Heer, A. B. Crawford and A. J. Eisnmayer have plans for proposed bank and office building; 12 stories, perhaps 14; steel construction; dreproof; 60x129 feet.

N. C., Rocky Mount.—George J. Halles Gro cery Co. will erect store and office building (See "Stores.")

N. C., Rocky Mount.—John L. Arrington will erect store and office building. (886 "Stores,")

Tenn., Chattanooga.—John L. Snoddy, Chattanooga, is preparing plans to remodel and improve portion of Temple Court Bldg. for Commercial Bank & Trust Co., including steel-lined vault.

Tex., Brownsville.—Bank is being organized by E. F. Pollard of Tupelo, Miss., and others; will erect \$10,000 bank building.

Tex., Cuero.—Joseph Sheridan will receive bids to erect bank, store and office building

Tex., Dallas. — Commonwealth National Bank, John W. Wright, president, has plans . 1911.

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by Lang & Witchell, Dallas, for bank and office building at Main and Poydras Sts.; 12 stories; #reproof; 53x160 feet; cost \$250,000.

CHURCHES

Als., Birmingham.—Methodist Protestant congregation, Rev. T. C. Cassaday, pastor, will creek edifice to cost about \$50,000.

Ala., Mobile.—Congregation Ahavas Chesed. Alla, Mohite, Congregation Ahavas Chesco, lie Schwarz, president, has plans by Downey & Denham. Mobile, for temple; 40x65 feet; frame veneered with hollow tile and stucco; auditorium to sent 450 and gallery to sent 50; cost 38000.

Fla., Lake County.—Hagg Investment Co., Lawrence W. Hagg, president, main office, 27 New York Life Bldg., Kansas City, Mo., will erect edifice to cost \$13,500. (See "Land oncent.")

Fla., St. Augustine.—Rev. W. G. Fletcher, pastor of First Methodist Episcopal Church south, is interested in erection of chapet.

6a. Atlanta.—First Methodist Church will cred annex to Sunday-school; A. C. Wooley, steward.

steward.

Ga., Augusta.—Rev. C. T. Walker, pastor of Tabernacle Baptist Church (colored), has plans by L. F. Goodrich, Augusta, for institutional negro church; first floor for cooking and sewing schools, lnundry, etc.; upper floor for main auditorium to seat 1000; Sanday-school to seat 500 and gallery with 500 additional seating capacity; these three constructed to permit throwing all into one room with seating capacity of 2000; stairways 9 feet wide; cost \$100,000. (Recently poted.)

noted.)

La. Lafayette, — St. John's Catholic Church, Rev. W. J. Teurlings, pastor, will expend \$50,000 to erect edifice; 160x70 feet; semi-fireproof construction; private plans and bids. (See "Machinery Wanted.")

La. New Orleans.—Rev. E. W. Kuss is reported as interested in erection of \$3000 edifice at Grand Route, St. John and White Sts.

fice at Grand Route, St. John and White Sts.

Md., Sparrows Point.—Baptist congregation is having plans prepared by Juffus
Pyles, 220 N. Gilmor St., Baltimore, Md., for
silifie; one and a half stories; frame; cencrete foundation; Milton C. Davis, 15 E.
Eayette St., Baltimore, Md., is estimating
Miss., Emory.—Methodist congregation is
laving plans prepared by R. H. Hunt, Chattanooga, Tenn., for edifice; cost \$18,000,
Miss. West Point—Bantist Church is hav-

Miss. West Point.—Baptist Church is hav-ing plans prepared by R. H. Hunt, Chatta-noga, Teun., for Sunday-school building; nooga, Ten cost \$15,000,

Mo., St. Louis. - Chelteham Church of Christ will erect edifice; one story; cost \$17,000.

Mo., St. Louis.—Memorial Congregational Church, Rev. William Smith, pastor, will erect edition.

erect cumes.

N. C., Charlotte,—Villa Heights Associated
Reformed Presbyterian Church, Rev. E. G.
Carson, pastor, has not determined upon
plans for rebuilding edifice recently noted

plans for rebuilding edifice recently noted 8. C. Columbia.—Elimwood Park Baptist Church, Rev. Carifle Courtenay, pastor, will evet edifice: 58x80 feet; tower on both front corners: entrance in center of front; 20 rooms exclusive of auditorium, 13 of which may be thrown into auditorium by raising rolling curtains, giving seating capacity of 59, with room for 20) additional sents; belek: stone trimmings; open rafter werk ceiling: steam heat; electric lights; audi-lorium chairs; cost about \$17,000. (Recently noted.) noted.

S. C., Dillon,-Charlotte Methdoist Enis copal Church South is having plans prepared by Wheeler & Stern, Charlotte, N. C., for edifice to cost \$25,000.

edifice to cost \$25,000.

Tenn., Knoxville.—E. J. Kinzel, Artaur fox, Abe Blair and others are trustees of proposed church and school to be erected at Kinzel Springs; John Lotspelch, chairman of building committee.

Tex., Pecos.—Methodist congregation will erect edifice; cost \$20,000. Address The Pastor, Methodist Church.

Va.-Tenn., Bristol.—First Presbyterian Church will open bids October 1 to remodel edifice and erect Sunday school addition: 925 feet; ordinary construction; steam heat; electric lighting; cement sidewalks; cost \$35,000; plans by Baumann Bros., 713 llenson Bldg., Knoxville, Tenn. (Recently noted.)

CITY AND COUNTY

Ala., Huntsville — Jail. — Madison County Commissioners will repair and renovate jall and erect addition to replace present annex; Dr. William H. Oates, State Prison Inspector, Montreeven.

Ala., Athens — Jail. — Judge of Probate Court of Limestone County may be addressed

relative to plans to erect jail; cost \$26,000. (Recently noted.)

Fla., Jacksonville-Engineers' Office.—City opened bids to erect engineers' office at Main and Orange Sts.; 53x73 feet; two stories; reinforced concrete and brick. W. E. Richardson, Jacksonville, is lowest bidder at \$29,700, (Recently noted.)

Fla., Kissimmee – Jail, – Osceola Courty Commissioners rejected bids for jail improve-ments and will proceed with improvements under supervision of Ludlum & McDonough, architects, Kissimmee; cost about \$8000.

Fla., Tampa—Poor Farm.—Hillsboro County ommissioners will erect 20-room addition to

Ga., Augusta-Stables,-City opened bids to erect stables; T. O. Brown & Son, New Orleans, are lowest bidders at \$7200. (Re-cently noted.)

cently noted.)

Ga., Lagrange—City Hall and Auditorlum, City Council will call election to vote on bond issue to erect combination city hall and auditorium; P. Thornton Marye of Athanta. Ga., has been engaged to prepare tentative plans and specifications and to superintend construction of building; auditorium to have seating capacity for 2000. (Judge F. Longley, E. B. Clark and others recently noted as committee.)

as committee.)

Ga., Lagrange—City Hall and Auditorium,—
City is having plans prepared by P. Thornton Marye, Atlanta, Ga., for city hall and
auditorium to seat 2000. (Previously noted.)

auditorium to sent 2000. (Previously noted.)
Ga., Mucon—City Hall.—City opened bids for improvements to city hall, including removing present hallway and using space for offices, construction of vault in basement, changing front steps, providing verauda, etc.; W. B. Paulin, Macon, is lowest bidder at \$6298; plans by Curran Ellis, Macon. (Recently noted.)

Ga., Moultrie-Jail.—Colquitt county will probably vote in November on \$15,000 bond issue to erect jail. Address County Commissioners.

missioners.

Ky., Louisville — Poorhouse, — Jefferson County Commissioners have plans by Brinton E. Davis, Louisville, for main building at county poorhouse; brick: 40x140 feet; two storfes; 24 steeping-rooms; duing-room 50x82 feet; slate roof; steam heat; cost \$24,000; also selected same architect to prepare plans for home for dependent children, to be under control of Juvenile Court.

control of Juvenile Court.

Mo., Kansas City-Wharfhouse.—City will erect wharfhouse on Missouri River front; structural steel frame; metal lath; cement siding; 300x40 feet; wood floor; canopy over team side; equipped with traveling electric holst of three tons capacity, operated on steel track from wharf into building, electric locomotive crane; cost \$25,000; Clark R. Mandigo, Assistant City Engineer.

Okla., Clinton-City Hall.-City will vote September 19 on \$25,000 bond issue to creet city hall. Address The Mayor.

Okla., Pawhuska—Jall.—Osage County Com-missioners contemplate election to vote on \$100,000 bond issue to erect courthouse and

Va., Norfolk-Fire Station,-Board of Con-Va., Norfolk-Fire Station.—Board of Con-trol will receive bids until noon September 18 to erect fire station on Bute 81.; certified check for \$500, payable to City Treasurer; plans and specifications at office of Ferguson, Calrow & Taylor, architects, 622 Law Bidg., Norfolk. (Recently noted.)

· COURTHOUSES

Ky., Harrodsburg. — Mercer county will vote on \$50,000 bond issue to erect courthouse. Address County Commissioners.

N. C., Durham.—Durham County Commissioners selected site to erect proposed courthouse, to cost \$250,000; plans by Frank P. Milburn, Home Life Bldg., Washington, D. C.

Okla., Pawhuska.—Osage County Commis-sioners contemplate election to vote on \$100. 900 bond issue to erect courthouse and Jafl.

DWELLINGS

Ala., Birmingham.-Dr. J. T. Doster will erect residence; frame construction.

Aln., Montgomery,—J. R. Young will erect residence; cost \$12,000; construction begun.

Ala., Bessemer,—George D. Woodrow has plans by W. E. Benns, Bessemer, for dwell-lug; six rooms; furnace; cost \$2500; day labor. (Recently noted.)

nation. (Recently noted.)

D. C., Washington.—H. S. Urban, 636 F St.

S. W., will erect residences; 18x14 feet; hotwater hent; gas and electric lighting; granolithic sidewalks; cost \$2500 ench; construction by owner. (Recently reported as to
erect five dwellings.)

D. C., Washington. Ch.

D. C., Washington.-Clarke Waggaman, 1124

Connecticut Ave. N. W., will crect residence on R St. N. W.; four stories; English base-

D. C., Washington.—Dr. Thomas A. Claytor, 1315 New Hampshire Ave. N. W., has plans by Clark Waggaman. H24 Connecticut Ave. N. W., Washington, for residence on R. St.; English basement.

D. C., Washington,—Dr. Oscar Wilkinson, 198 L. St. N. W., will, it is reported, erect residence on North Capitol 8t.

D. C., Washington.—Story & Cobb. 1102 Connecticut Ave. N. W., are having plans prepared by Wood, Donn & Doming, 898 17th 8t. N. W., Washington, for residence on Mas-sachusetts Ave. extended; three stories; white limestone and stucco; Italian Renais-

waite linestone and stucco: Italian Renals-sance style; 39 rooms; six baths; cost \$50,000, D. C., Washington.—A. R. Townsend has plans by Hunter & Bell, 505 7th St. N. W., Washington, for three dwellings at 1704-08 A St. S. E.; two stories; brick; cost \$4500.

D. C., Washington,-R. J. Law of Pittsburg Pa., will erect residence at Third & Ritten

nonse 818.

Fla., Jacksonville.—E. J. Blum will erect residence; two stories; frame.

Fla., Jacksonville.—Violet Hearnes will erect residence; two stories; frame.

Fin., Jacksonville,—Springfield Presbyterian Church will erect parsonage; two stories; frame construction with concrete blocks. Ad-dress The Pastor, Springfield Presbyterian

Fla., Leesburg.-J. A. Williams will erect

Fla., St. Augustine.—Joseph Baya will erect residence.

Ga., Atlanta.—Mrs. M. 1. Floyd will creet esidence; cost \$3000.

Ga., Atlanta.—Paul Goldsmith will erect four one-story dwellings; frame; cost \$2000 each; day labor.

Ga., Atlanta.-J. H. Whisenant will exect three one-story frame dwellings; cost \$2000 each; day labor.

Ga., Wayeross, --Mrs. J. E. T. Bowden will rect three two-story dwellings; construction

Ga., West Point.—Mountain Springs Company, George H. Lanler, president, plans to crect cottages on company's property near West Point.

Ky., Louisville,-II. S. Renshaw will erect ce : cost \$3000.

esidence; cost \$3900.

Ky., Louisville.—M. H. Gabhart will erect residence; brick veneer; cost \$3500.

Ky., Louisville.—Blanche Murphy will erect residence; frame; cost \$3300.

La., Lake Charles.—J. W. Rosteet will erect residence.

La., New Orleans.—Miss Louise McGehee will erect single cottage; frame; cost \$3000.

Md., Annapolis.—Mrs. James 8, Taylor has plans by Wilson Porter Smith, 2300 Roslyn Ave.; 16 rooms; two baths and pantry; ex-terior of French design; Interior colonial.

Md., Bultimore.—N. M. Helner has plans by J. F. Farley, 43 Franklin Bldg., Balti-more, for coltage on Kate Ave.; two and a bulf stories; frame; 29x33 feet; steam beat; slate roof; cost \$4000.

Md., Baltimore.-J. E. Lafferty, 11 E. Pleas Md., Baltimore.—J. E. Lafferty, 11 E. Pleasant St., Baltimore, prepared plans for residence at Charles and 25th Sts.; contractors estimating are John S. Moke, 1825 W. Baltimore St.; John A. Sheridan, Maryland Telephone Bldg.; B. W. & E. Minor, 224 W. Pratt St., all of Baltimore; Hugh S. Patterson and Jacob Peters; owner's name withheld.

Md., Baltimore.—M. F. Carter, 1049 Ecnett Pl., will erect 24 dwellings on 16th St.; two stories; iron-spot brick; stone trimmings; 14x49 feet; cost \$50,000.

Md., Baltimore.—E. J. Gallagher Realty Co., 2612 Fleet 8t., purchased site on Hunt-ingdon Ave., near 25th 8t., 122x174 feet, and will erect number of two-story brick dwell-

Md., Baltimore.—Murray & Haynes, 1700 Ellamont 8t., is having plans prepared by M. H. Murray, 1700 N. Ellamont 8t., for cot-tage on Carlisle Ave.; two and a half sto-ries; frame; 27x29 feet; cost \$3000.

ries; frame; 27x29 feet; cost \$3000.

Md., Baltimore.—Walter M. Gleske, Gunther Bidg., prepared plans for cottage at Ten Hills; two stories; frame; contractors estimating are J. Henry Smith, 1426 Light St.; John F. Kunkel, 413 Lemmon St., both of Baltimore; Henry Nagel of Catonsville, Md., and A. S. Patterson; owner's name withheld.

Md., Baltimore.-Otto G. Simonson, American Bidg., Baltimore, is preparing plans for cottage at Mont Alto; two and a half sto-ries; frame and stucco; slate roof; concrete foundation; verandas on three sides; cicctrie lights; steam hent; cost \$10,000; contractors estimating are Henry S. Rippel, 1-7 Clay St.; L. O. Hildebrand & Bro., 315-17 Courtland St., and Maryland Contracting Co., all of Baltimore; owner's name withheld.

Md., Relay.—John E. B. Kilbourn will creet exidence on Rolling Rd.

residence on Rolling Rd.

Mbss., Laurel. Stewart M. Jones of Gulf States Investment Co. will erect bungalow; kxô0 feet; brick veneer; hot*air heat; electric lighting; cement sidewalks; cost \$2000; plans by P. J. Krouse, Meridian, Miss.; will open blds within two weeks.

Mo., Kansas City.—James O, Wade will erect II residences; stone and veneer; cost \$55,000.

Mo., Kansas City.—James Wilson will erect two dwellings; brick veneer; cost \$6000. Mo., Kansas City.—James Reed will erect dwelling; brick; cost \$6500.

Mo., Kansas City.—John II. Moore will rect dwelling; brick veneer; cost \$300.

Mo., Kansas City.—F. B. Hughes will erect 49x40-foot residence; cost \$1000; date of opening bids not set. (Recently noted.)

Mo., 8t. Louis.—Elmhurst Real Estate Co. will erect dwelling; two stories; cost \$500.

Mo., 8t. Louis,—Lindell Real Estate Co. will erect three dwellings; two and a half stories; cost \$12,000.

Mo., 84, Louis.—Leisner Realty Co. will erect two dwellings; two stories; cost \$8900, Mo., 84, Louis.—George F. Bergfield Invest-neent & Construction Co. will erect six dwell-bigs in Parkview; two stories; brick; 23x15 feet; cost \$9250.

N. C., Candor.—D. C. Ewing is having plans prepared by Hook & Rogers, Charlotte, N. C., for dwelling; frame; cost \$9000. (See "Ma-chinery Wanted.")

N. C., Charlotte.-W. F. Dowd is having plans prepared by Hook & Rogers, Charlotte, for residence; frame; steam heat; electric lighting : cost \$6000.

N. C., Dunn.-J. D. Ezzell will erect resi-

N. C., High Point,-W. G. Barnett will erect dwelling

N. C., High Point,-J. F. Hayden will erect dwelling.

dwelling.

N. C., Laurinburg.—James F. Blue is having plans prepared by Hook & Rogers, Charlotte, for residence; frame; cost \$5000.

N. C., Laurinburg.—Mrs. J. M. McNeil is having plans prepared by Hook & Rogers, Charlotte, N. C., for residence; frame; steam heat; electric lighting; cost \$6000.

N. C., Manchester,—Kent-Jordan Company, Greenshoro, N. C., will erect residences. (See "Land Developments,")

"Land Developments.")

N. C., Mt. Afry.-J. A. Yokley has plans
by Charles W. Barrett, Raleigh and Winston-Salem, N. C., for dwelling; forsto feet;
press-brick veneer on frame; hot-water heat;
electric lighting; cost \$10,000; day labor.

N. C., North Wilkesboro,—Schuyler Lawrence, H. H. Morehouse and Mr. Morrill, all
of Chihuahua, Mexico, purchased John Pearson orchard near Lithia Springs, and will, it
is reported, erect number of bungalows.

N. C. Raleigh,—W. J. Young, Jr. has plans

N. C., Ralelgh.—W. J. Young, Jr., has plans by Charles W. Barrett, Raleigh and Win-ston-Salem, N. C., for dwelling; 10x66 feet; frame: hot-water heat; cost \$5500; bids opened September 12; J. G. Adams, Raleigh and Winston-Salem, N. C., probable con-tractors. ractors, N. C., Stanley.—O. B. Carpenter will erect

N. C., Stanley.—O. B. Carpenter will erect residence; six rooms. N. C., Wake Forest.—W. R. Powell has plans by Charles W. Barrett, Raleigh and Winston-Salem, N. C., for dwelling; 89x100 feet; ordinary construction; hot-water heat; electric lighting; cost \$12,000; day labor.

N. C., Winston-Salem,—P. T. Slade will exect r.sidence; two stories; seven rooms; frame; shingle roof.

Okla., Oklahoma City.-J. R. Fant of Sul-phur, Okla., will erect 16 dwellings; two stories; seven rooms; cost \$3500 each.

stories; seven rooms; cost \$550 each.

Okla., Tulsa.—S. B. Wright will erect residence; two stories; cost \$3000.

Tenn., Chattanooga.—H. R. Biederman of Templeman Plano Co. is having plans prepared by John L. Snoddy, Chattanooga, for dwelling; brick and stone; cost \$4000.

Tenn., Chattanoogs.-Herndon Barr is havlag plans prepared by John L. Snoddy, Chat-tanoogn, for residence; buff brick; Red Mountain sandstone trimming.

Tenn., Nashville.—Mrs. Tillie Cline will erect residence; cost \$6500.

Tenn., Nashville.—Dr. W. D. Haggard will erect cottage; cost \$4000.

Tenn., Nashville,—Dr. W. B. Walton will rect residence; brick; cost \$4000,

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Tex., El Paso.-C. T. Heffler will erect dwelling; two stories; cost \$5400.

Tex., El Paso.-L. F. Clark will erect residence; brick; cost \$3000.

Tex., Luling.-I. Masur will erect residence.

Tex., San Antonio.—National Building & Investment Co. plans to erect several dwellings. (See "Machinery Wanted.")

Va., Ocean View.—J. M. Bunting will receive bids until September 18 to erect residence at Lenox.

Va., Roanoke,-W. L. Belborn, Princeton, W. Va., will erect residence; construction begun.

W. Va., Benwood,—Rev. J. W. Davis will open bids about September 29 to rebuild dwelling and store at Boggs Run reported burned; 39x40 feet; two stories; frame; natural-gas heat and lighting; plans by J. W. McDermit.

GOVERNMENT AND STATE

Ala., Gadsden-Postoffice.—Treasury Department, James Knox Taylor, supervising architect, Washington, D. C., opened bids to erect postoffice building. Interstate Construction Co. of Saginaw, Mich., is lowest bidder at \$94,262.

Md., Baltimore—Armory.—State plans to erect armory for Fourth Regiment to replace present structure; will provide quarters for State offices, convention hall, smaller hall for use of command, etc.; J. Frank Supplee, assistant secretary of United States Fidelity & Guaranty Co., Calvert and German Sts., is vice-chairman of commission.

N. C., Raleigh—Cemetery Building.—H. L. Pettus. Major and Quartermaster, U. S. Army, Washington, D. C., receives bids until II A. M. October 9 for constructing outbuilding and concrete walks at National Cemetery; specifications on application to above or to superintendent of cemetery at Raleigh.

Tex., San Antonio—Hospital.—Southwestern Insane Asylum, Dr. F. S. White, superintendent, will expend \$45,000 to erect hospital; two stories; to accommodate 100 patients; steam heat; electric lighting; architect not selected. (Recently noted.)

Va., Berkley Station, Norfolk—Training Station.—Government will make improvements to St. Helena Training Station under direction of Executive Officer Stone of U. S. Revenue Ship Franklin; will weatherboard 500 bungalows halfway from ground, change heating system from underground steam equipment and replace board sidewalks with granolithic pavements five feet wide.

W. Va., Point Pleasant-Postofflee,—Treasury Department, Office of Supervising Architect, Washington, D. C. Proposals received in this office until 3 P., M. October 16, and then opened, for construction, complete (including plumbing, gaspiping, heating apparatus, electric conduits and wiring and lighting fixtures), of United States postoffice at Point Pleasant, W. Va.; two stories; ground area of 5500 square feet; fireproof construction; brick facing and stone triumings drawings and specifications may be obtained from custodian of site at Point Pleasant, W. Va., or at this office, at discretion of supervising architect; James Knox Taylor, supervising architect;

HOTELS

Ala., Aliceville,—T. J. Dunkin of Carrollton, Ala., will erect hotel; 30 rooms; brick; cost \$6000.

Ala., Aliceville,-T. J. Dunkin will erect hotel; cost \$18,000.

Ala., Birmingham.—Melbourne Hotel Co. incorporated with \$8000 capital stock; W. J. Hussey, president; A. B. Freeman, general manager; A. C. Turnham, secretary-treasures.

Fla., Jacksonville.—William Burbridge will erect addition to hotel; two stories; brick; 53x70 feet.

Fia., Jacksonville.—Mrs. Luck Wilson leased building adjoining Waverly Hotel, and will remodel into lobby, office and cafe, etc.

Fla., Pensacola.—J. H. Drummond and others are having plans prepared for proposed hotel on St. Andrews Bay; fireproof; '900 reoms.

Ga., Macon.—Midland City Hotel Co., R. F. Burden, president building committee, will open bids September 30 to erect hotel; nine stories; cost \$350,000; plans and specifications on file at office of Builders' Exchange, Atlanta, Ga., and Baltimore, Md., and W. L. Stoddart, 30 W. 38th St., New York. (Recently described.)

Ga., Manchester.—Manchester Development Co. will erect hotel; 30 rooms; frame; electric lights; steam heat; awarded contract to Corley Lumber Co, Manchester; construction begun. N. C., Blue Mont.—Southern Baptist Assembly, B. W. Spilman, general secretary, has plans by J. M. McMichael, Charlotte, N. C., for summer hotel recently noted; 100 rooms; ordinary construction; probably electric lighting; cost \$15,000; E. F. Mumford, general manager, will supervise construction. (See "Machinery Wanted.")

N. C., Manchester.—Kent-Jordan Company, Greensboro, N. C., will erect hotels. (See "Land Developments.")

Okla., Muskogee. — Baltimore Investment Co. will resume construction of proposed Baltimore Hotel; five stories; two lower stories of brick with Carthage stone trimmings; upper stories of brick; steel and concrete skeleton.

Tex., Austin.—8. N. Mapes, care Cass Gilbert, 11 E, 24th St., New York, is reported interested in erection of \$500,000 hotel.

Tex., Bryan.—J. T. Maloney will expend \$50,000 to erect fireproof hotel; four stories and basement; vacuum steam heat; plans by Alfred Glies Company, San Antonio; architects recenty noted to receive bids until October 2. (See "Machinery Wanted.")

Tex., Riohondo.—E. H. Smith and F. M. Paul. Sr., will erect hotel on clubhouse plans, consisting of main building surrounded by small bungalows; also bathhouse to accommodate 16 men and 16 women.

Va., Norfolk.—W. T. Eastwood, A. Rosenbaum and A. Levitin, all of Portsmouth, Va., purchased Victoria Hotel and will expend about \$15,000 for improvements.

Va., Norfolk.—Commercial Corporation incorporated with \$25,000 capital stock; Norman Hofheimer, president; D. 8. Einstein, vice-president; E. W. Salamonsky, secretarytreasurer.

MISCELLANEOUS

Ala., Montgomery-Shed.-Mobile & Ohio Railroad Co., B. A. Wood, chief engineer, Mobile, Ala., will erect cotton shed; cost \$16,000.

Fla., Tampa—Casino.—Centro Espanolde, Tampa, will receive bids until 6 P. M. October 2 to erect casinos in West Tampa and Ybor City; separate bids for each structure; certified check for \$500, payable to Celestino Vega, president of El Centro Espanol; drawings and specifications of first structure at office of Fred J. James, architect, Drew Bidg., West Tampa, and for latter at office of Francis J. Kennard, American National Bank Bidg., Tampa. (Previously noted.)

Fla., Tampa—Stable.—J. B. Hockaday will erect stable; cost \$10,000.

Ga., Waycross — Hospital. — Ware County Medical Society and King's Daughters will erect addition to hospital; cost \$10,000.

Ga., Wayeross-Hospital.—Atlantic Coast Line Railway, E. B. Pleasants, chief engineer, Wilmington, N. C., will expend \$10,000 for improvements to general hospital of Plant system.

La., New Orleans—Clubhouse,—Young Men's Gymnast Club will, It is reported, expend \$25,000 for improvements to clubhouse, including enlarging and remodeling cafe and bar, installation of kitchen and refrigerating plant, improvements to bathing department, reconstruction of building adjoining present lounging-rooms to contain 37 lounging-rooms; will double capacity of Turkish baths and will install 25 needle and shower luths, etc.

Mo., St. Louis—Produce Exchange.—Terminal Ralirond Association is reported as interested in crection of proposed produce exchange in North St. Louis; equipped with cold-storage facilities, auction rooms, offices of St. Louis Produce Exchange, etc.; cost about \$250,000.

Mo., St. Louis-Stable.-J. Hahn Bakery Co. will erect stable; two stories; cost \$5000. N. C., Manchester-Clubhouse.-Kent-Jordan Company, Greensboro, N. C., will erect clubhouse. (See "Land Developments")

clubhouse. (See "Land Developments.")

N. C., Wilmington—Clubhouse.—Lakeside
Park Country Club has plans by L. A. H.
Koethe, Wilmington, for clubhouse at Lakeside Park; two stories; front verandas on
each floor; dining-room 14x20 feet; musicians'
balcony overhanging clubroom; exterior
treated with pergolas and wide overhanging
eaves and balconies.

Tenn., Chattanooga—Sanatorium,—Chattanooga Tuberculosis Sanatorium, E. Y. Chapin, chairman of building committee, approved plans for proposed administration and ward buildings.

Tex., Grand Prairie—Clubhouse.—Grand Prairie Commercial Club will erect clubhouse.

Va., Newport News—Hospital.—Chamber of Commerce is interested in erection of hospital; cost \$30,000.

RAILWAY STATIONS

Ala., Attalla.—State Railroad Commission, Montgomery, Ala., accepted plans submitted by Alabama Great Southern Railroad, C. Dougherty, chief engineer, Cincinnati, O., for proposed union depot; probably brick or concrete walls 14 inches thick; concrete foundation.

Fla., Daytona.—Florida East Coast Railway, J. H. Nelson, general superintendent, St. Augustine, Fla., will erect passenger station; extend covered shed and improve old depot.

N. C., Southport.—Wilmington, Brunswick & Southern Railroad, Z. W. Whitehead, president, Wilmington, N. C., will erect passenger station.

SCHOOLS

Ala., Aliceville.—Aliceville Academy is reported as to probably erect additional building to cost about \$9000.

Ala. Eusley.—Board of Education, John L Parker, president, will expend \$50,000 to complete high-school building.

Ala., Florence.—Florence Free Kindergarten Association will erect kindergarten building. Ala., Florala. — Board of Education has plans for \$15,000 school.

Ala., Onconta.—State High School Commission has plans for high-school building for Blount county; cost \$10,000. (Recently noted.)

Ala., Tuscaloosa.—City contemplates calling election to vate on \$25,000 bond issue to erect school in West End and improvements to other schools. Address The Mayor.

Ala., Tuscaloosa.—Board of Education will consider expending \$35,000 to erect grammar school in West End and repair and remodel Stafford and Jemison grammar schools.

Ark., Midland.—School Board, R. A. Mc-Eclim. secretary, will open bids and let contract September 17 to erect school building; 56x77 feet; steam heat; electric lighting; cost \$10,000; plans by H. C. Schwebke, Fort Smith, Ark.

Ga., Atlanta.—Board of Education accepted site for proposed Tenth Ward school near Bonnie Brae; cost \$10,000.

Ga., Cordele.—City plans to vote on \$10,000 bond issue for school improvements. Address The Mayor. (See "Road and Street Work.")

Ga., Sardis.—Board of Education, E. B. Graham, secretary, Waynesboro, Ga., will open bids within next 60 days to erect school; two stories and basement; brick; ordinary construction; heating, lighting, etc., not determined; cost \$10,000. (Recently noted.)

Ky., Bowling Green.—St. Joseph's Church will erect school; cost \$15,000.

Ky., Jackson.—Board of Education receives bids through Adams & Holliday, First National Bank Bidg., Jackson, until noon September 18 to erect school building; bids received as a whole or separately as follows: Excavation, masonry and concrete work brick work, carpenter work, lumber and mill work, sheet-metal work and roofing, plastering and slate blackboards, painting and glazing, fron and steel work and heating and ventilating; plans and specifications at office of Adams & Holliday, at Jackson, or E. Stamler, architect, 393-394 Merrick Lodge Bidg., Lexington, Ky.

Ky., Louisville.—Jefferson County Board of Education will erect Rogers Clark Ballard Memorial School; cost \$15,000; W. S. Kemp, secretary Board of Education. (Recently noted as Rogers Clark Memorial Consolidated School.)

Ky., Pineville.—City will vote on \$30,000 bond issue to erect high school. Address The Mayor.

Ky., Pineville.—City will vote in November on \$30,000 bond issue to erect high-school building. Address The Mayor.

La., Coushatta.—Red River Parish School Board rejected bids for proposed high school, and is having plans revised by E. F. Neild, Shreveport, so bids will come within appropriation.

La., New Orleans.—Tulane University administrators, through Prof. Warren P. Laird of University of Pennsylvania, Philadelphia, Pa., selected following architects to submit competitive plans for 12 buildings for H. Sophie Newcomb Memorial College, four to be constructed as soon as possible and others as needed: Andry & Bendernagle, De Buys, Churchill & Labouisse, and Emil Well, all of New Orleans; Cram, Goodhue & Ferguson of New York, Boston, Mass., and Houston, Tex.; Pell & Corbett of New York; Day Bros. & Klauder, Wilson Eyre and Zantzinger, Borle & Medary, all of Philadelphia,

Pa. (Plans of this competition fully de-

La., New Orleans.-M. E. Schreiber will erect cottage; frame; cost \$3100.

Md., Brunswick.—City has plans by A. Cookman Leach, 323 N. Charles St., Baltimore, Md., for school; two stories; brick; slag roof; contractors estimating are Henry J. West, 1566 Clifton Ave.; John Hiltz & Sons Company, 3 Clay St., both of Baltimore, Md.; H. B. Funk, O. B. Karn, both of Brunswick; George E. Wyne, Munsey Bldg.; C. J. Cassidy Company, 523 13th St. N. W. both of Washington, D. C.; G. Laize & Bro, Winchester, Va. (Recently noted.)

Miss., Georgetown.—City will issue & an bonds to erect school. Address The Mayor.
Miss., Greenwood.—City has plans by R. H. Hunf. Chattanooga, Tenn., for combination grammar and high school; cost \$45,00.

Miss., Gulfport.—Seashore Camp Ground School of Methodist Church to erect \$20,000 school building.

Miss., Perkinston.—Harrison County Commissioners, Gulfport, Miss., will establish proposed agricultural high school.

Miss., Poplarville. — Agricultural High School trustees will erect dormitory building. N. C., Charlotte. — Mecklenburg County Board of Education, R. J. Cochran. County Superintendent, will erect one-room schools at Clerk Creek No. 1 (colored) and Long Creek No. 3 (white); also additional rooms at Berryhill No. 3, Long Creek No. 4, Clear Creek No. 2 and Crab Orchard No. 5.

Mo., Kansas City.—Central College of Osts. opathy, Dr. J. W. Hofsess, president, will erect college building; three stories; steel or reinforced concrete; cost about \$30,000.

Mo., Kansas City.—Rev. Father McCaffrey will erect school building; cost \$3000.

Mo., Savannah.—Savannah school district has plans by Rudolph Meyer, St. Joseph, Mo., for library and auditorium; 52x80 feet; two stories; ordinary construction; heating not determined; electric lighting; cost \$11,000; date of opening bids not set. (Recently reported voted \$20,000 library and school bond issue.)

N. C., Troy.—School District will vote October 3 on \$20,000 bond issue to establish State High School. Address Trustees of Troy Graded School District.

Okla., Caddo.—School Board of District No. 5 receives bids until 2 P. M. September 11 to erect two-story-and-basement brick high-school building; certified check for 2 per cent. amount of bid; plans and specifications at office of School Board at Caddo or Smith & Parr, architects, Oklahoma City, Okla., or may be had on deposit of \$15.

S. C., Greenville.—School Board is having plans prepared by F. H. and J. G. Cunningham, Greenville, for proposed school and improvements to present structure.

S. C., Honea Path.—Trustees of Honea Path School District receive bids until September 21 to erect addition to graded school building; certified check for \$250, payable to L. M. Wilson, chairman; plans and speciacitions at office of Mr. Wilson at Honea Path, and of Sayre & Baldwin, architects, Anderson, S. C.

S. C., Honea Path.—Board of Education, L. M. Wilson, chairman, will open bids September 21 to erect addition to school building; ordinary construction; hot-air heat; electric lighting; plans by Sayre & Baldwin, Anderson, S. C. (Recently noted.)

Tenn., Johnson City.—City will erect Industrial School for Negroes at Broring Heights. Address The Mayor.

Tenn., Knoxville.—E. J. Kinzel, Arthur Cox and others are trustees of proposed church and school to be erected at Kinzel Springs. (See "Churches.")

Tex., Emma.—Emma School District trustees will issue bonds to erect \$16,000 school.

Tex., Georgetown.—Alumni Association of Southwestern University, Tom L. McCullough, president, Waco, Tex., proposes retion of library or administration building.

Tex., Harrisburg.—City is having plans per pared by F. S. Glover & Sons, Housion, Tex for school; six rooms; brick; cost \$15.00 (Previously noted.)

Va., Staunton. — Beverley Manor School Board will erect school to cost at least \$10,000.

W. Va., Moundsville,—Moundsville Independent School District trustees will erect school; sectional structure; one story; 2529 feet.

STORES

Ala., Oneonta.—J. A. Brice & Son will erect store to replace burned structure. (Recently reported burned.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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Ala., Montgomery.—Van Antwerp Drug Co., will erect business building; two stories; cost \$559.

Ala., Montgomery.—A. E. Stiles will expend \$600 to remodel building at 26 S. Royal St.

Ark., De Queen.—Texas Produce Co., Tex-rkana. Ark., has not definitely determined upon plans for 50x140-foot building recently

Ark., Monticello.-L. W. Dillard will erect

Fig., Plant City.—W. B. Herring has not selected architect to prepare plans for department store; 50x55 feet; brick and stone; electric lighting; cost \$12,000. (Recently

Fla., Leesburg.-D. E. Davidson will erect lasiness building; two stories; concrete; \$200 feet.

Ga., Atlanta.—William A. Healey is re-ported as having plans by Morgan & Dillon, Atlanta, for store and office building. (See "Rank and Offices.")

"Bank and Offices.")

Ga. Atlanta.—I. R. Jeffers of Progressive Business Building & Guarantee Co., Richmond, Va. awarded contract to Falls City Construction Co., Louisville, Ky., to erect proposed Arcade Building; 90x406 feet; frontage on Peachtree St.; four stories and basement; theater on Ivy St. to seat 1500; main entrance through arcade; stores front on Ivy St.; underneath balance of building, two stories; stone, brick and steel construction; marble staffways, wainscoting and floors; two elevators; cost \$335,000.

Ga. Atlanta.—Dr. H. F. Scott, 274 Peach-

Ga., Atlanta.—Dr. H. F. Scott, 274 Peach-tree St., contemplates erection of store and apartment building. (See "Apartment-

Ga., Atlanta.—Dr. H. F. Scott will crect store and apartment building; two stories; jointly feet; brick and stone; five stores on first floor 20x104 feet each; apartments on upper floor; cost \$40,000.

upper floor; cost \$40,000.

Ga. Atlanta.—Thomas Plit has plans by George E. Murphy, 332 Candler Bidg., Atlanta, for department store; \$4x120 feet; two stories and basement; mill construction; steam heat; gas and electric lighting; electric passenger and freight elevator; gravel roof; cost \$25,000. (Recently noted.)

Ky., Hodgenville.—Winn Bros & Co. will probably erect store to replace burned structure; cost about \$10,000.

Ky., Louisville.—John Elith will creet store.

Ky., Louisville.—John Eith will erect store building; two stories; brick; cost \$6000. La., Baton Rouge.—C. A. Belisle is having plans prepared for two stores recently noted; 52100 feet; two stories; ordinary construc-tion; hot-water heat; cost \$12,000; day labor. (See "Machinery Wanted.")

La., Lake Charles.—S. H. Kress & Co., 395 Broadway. New York, will soon begin erec-tion of proposed store building.

La., New Orleans.—Theodore J. Lala will erect two stores and theater at Teche and

Slidell Sts., Algiers.

La., New Orleans.—Dr. C. M. Jacobs of Chicago, Ill., will remodel buildings at 1618-39 Dryades St. for Schurr Manufacturing Co. and will make both buildings into one.

La., New Orleans.—George A. Thomas will erect business building; two stories; brick; cost \$3000.

cost \$3000.

Md., Baitimore.—Sondheim-Frank & Co. are having plans prepared by Frank & Kayanagh, 328 N. Charles St., Baitimore, to remodel store on Lexington St. between Charles and Little Sharp Sts.

Miss., Lucedale.—I. H. Weaver is having plans prepared by Slater & McCrary, Mobile. Ala., for store and office building. (See "Bank and Offices.")

Mo., St. Louis.—G. W. Brown will not erect usiness building, as recently reported.

N. C., Rocky Mount.—Geo. J. Halles Grocery Co. will erect store and office building; two stories; brick; cement floors; fireproof; cost about \$10,000.

N. C., Rocky Mount.—John L. Arrington will erect store and office building; two storles; brick; cost about \$10,000.

N. C., Washington.-W. B. Morton & Co. will erect business building; two stories; brick.

Okla., Oklahoma City.-Charles Bassett of

Okla, Oklahoma City.—Charles Bassett of El Paso, Tex., will, It is reported, erect busi-ness building at Main St. and Broadway. S. C., Sharon.—Hill Banking & Mercan-tile Co. is having plans prepared by J. S. Starr, Rock Hill, for store building; three stories and basement; 67x124 feet; ordinary construction; hot-air heat; lighting not de-cided; cement sidewalks and iron grating;

Ala., Mobile.-G. Van Antwerp & Sons will nect business building; two stories; brick cost of structure \$15,000; day labor.

Tenn., Chattanooga.—Montague estate con-templates erection of four business build-ings; two stories; brick.

Tex., Corpus Christi.—M. Little of Lampassas, Tex., will erect proposed business building; cost \$40,000.

Tex., Corpus Christi.-Gugenhelm & Company are receiving bids to remodel Uchlinger filds.; cost about \$15,000.

Tex., Cuero,-Joseph Sheridan will rebids to erect store, bank and office building.

Tex., Elgin.—P. Bassist has plans by S. Hardwick for business building; 50x100 feet; cost \$6000; bids opened September 14. (Recently noted.)

Tex., Houston.—P. C. Roberts will erect store and apartment building at 5th St. and Harrisburg Rd.; 50x45 feet; lower floor for stores; upper floor for apartments. Tex., Palestine.—Dr. E. B. Parsons will erect business building to replace burned Murphy-Parson building.

Tex., Plainview.— Dr. E. A. Woldert of Tyler, Tex., will erect two business buildings; two stories; brick.
W. Va., Benwood.—Rev. J. W. Davis will rebuild store and dwelling at Boggs Run. (See "Dwellings.")

THEATERS

Ga., Atlanta.—I. R. Jeffers of Progressive Business Building & Guarantee Co., Rich-mond, Va., will erect Arcade Bidg., contain-ing theater, stores, etc. (See "Stores.")

Ga., Dalton.—Phil Heyward, manager of Dalton Picture Show, is interested in estab-lishment of opera-house; plan is to lease building and remodel and improve for this purpose; 60x169 feet; fireproof; cost \$75,000; plans not perfected.

Ky., Bowling Green.—Crescent Amusement Co. will expend \$3500 to remodel building at Main and State Sts.

Ky., Middlesboro.—J. R. Taylor of Pig Stone Gap, Va., is reported as considering erection of theater.

La., New Orleans.—Theodore J. Lala will erect theater and two store buildings. (See "Stores.")

Okla, Oklahoma City.—B. H. Powell and Edward Croak have plans by George Schrei-ber, Oklahoma City, for theater; scating ca-pacity 1000; cost \$55,000 to \$80,009.

S. C., Aiken.-Aiken Theater Co, will erect opera-house on Park Ave.; cost \$12,000.

Va., Roanoke.—Henritze Amusement Co. will crect theater; steel and brick; cost

Va., Big Stone Gap .- J. R. Taylor will erect theater to cost \$18,000.

WAREHOUSES

Fla., Jacksonville.—Merchants' Broom Co. contemplates erection of warehouse. (See "Miscellaneous Factories" and "Machinery Wanted.")

Fla., Miami. - Jack Crosland will erect varehouse; two stories.

Ga., Atlanta.—Charles E. Caverly is reported to erect warehouse.

Ga., Brunswick.—Southern Railway, B. Herman, chief engineer of maintenance of way and structures, Washington, D. C., will erect warehouse, etc.

Ga., Lagrange.—Dunson Mills awarded contract to Cleaveland & Kellum Lumber Co., Lagrange, to erect cotton warehouse; two stories; four sections each; capacity 4000 bales.

Ky., Louisville.—E. G. Duckwell Company has plans by D. X. Murphy & Bro., Louis-ville, for warehouse; one story; brick; cost \$75,009.

13,009.
La., Lake Arthur.—Lake Arthur Rice Milling Co. w.ll not at present erect warehouse.
Md., Baltimore.—Baltimore News Co., 318
W. Baltimore St., postponed indefinitely date
of opening bids to erect warehouse at 227 N.
Calvert St.: cost \$26,000; plans by Owens &
Sisco, Continental Bidg., Baltimore. (Previously posted.) viously noted.)

Md., Baltimore.—Terminal Warehouse Co., North and Pleasant Sts., purchased site ad-joining plant and will later erect addition to warehouse: plans not definite.

Mo., St. Louis.—Silgo Iron Store will erect addition to warehouse; cost \$9009.

N. C., Mooresville.—Iredell County Farmers' Union, Statesville, N. C., will probably erect warehouse. (See N. C., Statesville.)

N. C., Statesville.—Iredell County Farmers' Union will probably erect addition to ware-houses at Statesville and Mooresville, N. C.

Tenn., Chattanooga.-City will erect warehouse on City Wharf; frame and brick construction; 100x160 feet; 16,000 square feet floor space; cost about \$5000. (Recently

Tenn., Chattanooga. — Chattanooga Feed Co. Is having plans prepared by C. E. Beard-en, Chattanooga, for warehouse with grain

elevator in connection; three stories; 200x115 feet. (Previously noted.)

Tex., Dallas.—Wells-Fargo & Co., main office, New York, will erect warehouse; one story; brick; 50x195 feet; cost about \$8000; E. J. Riley, general agent, Dallas.

Tex., Waco.—Mrs. Gross will erect building at Mary and 14th Sts., to be occupied by National Biscuit Co.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Tex., San Antonio.—Dr. A. S. McDaniel awarded contract to National Building & Investment Co., San Antonio, to erect apartment-house; brick and concrete construction: cost \$30,000.

Va., Portsmouth.—Mrs. Susan Grice awarded contract to E. N. Wilkins, Portsmouth, to enlarge and remodel residence at 329 North St. Into apartment-house; cost \$5000.

BANK AND OFFICE

BANK AND OFFICE

Ala., Robertsdale,—Robertsdale State Bank has plans by and awarded contract to Comstock Construction Co., Loxley, Ala., to erect 25x40-foot bank building. (Recently noted.)

Fla., Jacksonville,—J. J. Heard awarded contract to erect bank and office building; if storles; bank on first floor; 25 offices on upper floors, ranging from 11x15 feet to 15x15 feet; Spanish Renaissance style; two lower floors of light-colored granife; upper storles of light brick broken in middle by terracotta panels; three entrances, bordered with white marble columns and pilasters; columns 3x25 feet; vestibule and lobby wainscoted with white marble to celling; four passenger and one freight elevators; counter surrounding center space of imported marble surrounded by wrought-fron grille; celling divided into panels by ornamental beams and cornices; vault three storles high in rear corner of banking room, lined through first-floor apartment with burglar-proof steel; safe-deposit department, with special lobby and burglar-proof door; lee-water fountains on each floor; mail chutes; watchman's clock; electric fan outlets; vacuum cleaner; steam heat; electricity from city mains; awarded contract for foundation to Southern Ferro Concrete Co., Atlanta Ga.; plans by John Keevan Peebles, Norfolk, Va. (Recently noted.)

La., Covington.—Covington Bank & Trust Co. awarded contract to J. D. Collins, New Orleans, La., to erect bank and office building; ornamental pressed brick; cost \$15,000; plans by William Drago, New Orleans, La.

plans by William Drago, New Orleans, La.

Md. Cumberland. — Werthelmer Bros, awarded contract to J. L. De Haven, Cumberland, to erect theater, office and lodge building. (See "Theaters.")

Tex., Brownsville. — Merchants' National Bank will expend \$70,000 to erect bank and office building; (6x129 feet; brick and stone; semi-fireproof construction; steam heat; electric lighting; cement sidewalks; electric pussenger elevator; plans by Atlee B. Ayres, Bedell Bidg., San Antonio, Tex.; contract (recently noted) awarded to Frontier Construction Co., Brownsville; contract for heating awarded to W. H. Putegnat of Brownsville. (See "Machinery Wanted.")

Va., Norfolk.—Mutual Building Association awarded contract to Vega & Richardson, Norfolk, to erect building on Tazewell St.; cost \$15,000.

\$15,000.

CHURCHES

Md., Baltimore.—Methodist Protestant congregation will have plans prepared by H. G. Crisp, 409 Calvert Bldg., Baltimore, for edifice at Annapolis and Maple Aves., Linthicum Heights; one story and basement; stone construction; awarded contract to S. Linthicum, 231 Courtland St., Baltimore.

thicum, 231 Courtland St., Baltimore.

8. C., Columbia.—Elmwood Park Baptist Church, Rev. Carlisle Courtnay, pastor, awarded contract to McA. McManus, Columbia, to erect edifice; 60x80 feet; ordinary construction; steam heat; electric lighting; cost312,000; plans by Shand & Lafaye, Columbia, (Recently noted.)

8. C., Greer.—Methodist Episcopal Church awarded contract to Smith Construction Co., Athens, Ga., to erect edifice; cost \$16,000; plans by Sayre & Baldwin, Anderson, 8. C. (Recently noted.)

Tex., Dallas.—St. John's Methodist Church, Rev. C. A. Long, pastor, awarded contract at \$12,000 to F. F. Lowman, Dallas, to erect Sunday-school room; brick and stone; will erect \$30,000 edifice at completion of this

CITY AND COUNTY

O., for iron work on county jail, and to Ward & Sweeney, Catlettsburg, for com-pleted work; cost \$6000; plans by J. M. King,

pleted work; cost \$8000; plans by J. M. King, Ashland, Ky.
Miss., Clarksdale—Levee Board Building.—
City awarded contract to Olson & Lesh, Memphis, Tenn., to erect proposed levee board building; brick and concrete; cost \$33,000.
Mo., Kansas City—Home.—Independence county awarded contract to erect cottage at McCure Home; two stories; stone and stucco; 30x40 feet; cost \$12,767; will accommodate 16 boys.

COURTHOUSES

Ga., Augusta.—Richmond County Connelssioners awarded contracts for improvements to courthouse as follows: At \$1765 to David & Kennedy, Augusta, for tiling main corridors; at \$1680 to W. B. Toole, Augusta, for repairs to tin roof, renewing balustrades and painting new work, and at \$227 to T. O. Brown, Augusta, for fireproof floor in ordinary's office. (Recently noted.)

Okla., Jay.—Delaware County Commissioners awarded contract to F. E. Shallenberger, Tulsa, Okla., to erect proposed courthouse.

Tenn., Dunlap.—Sequatchie County Commissioners awarded contract for erection of courthouse to replace present structure; fire-proof; brick; concrete floors and vaults; 50x 70 feet; J. H. Heard, County Judge.

DWELLINGS

Ark., Pine Bluff.—D. L. Bain of D. L. Bain & Co., Portland, Ark., awarded contract to erect residence; cost \$12,000.
D. C., Washington.—M. G. Archibald awarded contract to Jesse Bunch, 9:5 E St. S. W., Washington to erect two dwellings at Albemarle St. and Connecticut Ave. N. W.; two stories : frame : cost \$4000.

D. C., Washington.—Edmond Brady, Union Trust Bidg., awarded contract to John Simp-son, Washington, to creet two-story frame dwelling at 3312 Huntington Pl. N. W.; cost

dwelling at 3312 Huntington v. 1.

Fla., Jacksonville,—W. E. Hanley has plans by and awarded contract to Henry Taylor, 349 E. 7th St., Jacksonville, to erect dwelling; 32x49 feet; ordinary construction; vacuum steam heat; cost \$3800. (Mr. Taylor recently noted to erect dwelling.)

Fla., Jacksonville,—David A. Leon awarded contract to G. C. Priest, Duyal Bldg., Jack-sonville, to erect residence and garage; plans by R. A. Benjamin, 22 Blum Bldg., Jackson-ville. (Recently noted.)

Ga., Atlanta.—Mrs. M. M. Delbridge awarded contract to A. Hamilton & Son to erect two-story frame dwelling and three-story frame cottages; cost \$4500.

Md., Overlea, — John G. Elerman, 706 N. Patterson Arc., has plans by and awarded contract to John W. Nelson, Raspburg, Md., to erect dwelling; 36x46 feet; ordinary construction; concrete block walls; steam heat;

Miss., Gulfport.—George II. Thomas awarded contract to T. J. Rosell Manufacturing Co., Biloxi, Miss., to erect residence; cost \$2003.

N. C., Concord.—D. F. Cannon awarded contract to John R. Query, Concord, to re-model dwelling; contract for heating and plumbing awarded to Hackney Bros. of Charlotte, N. C. S. C., Union.—Mrs. W. E. Colton awarded contract to Geo. W. Smith, Union, to erect residence to replace burned structure; two stories.

Tenn., Lexington.-Al E. Beasley awarded

renn., Lexington.—Al E. Beasley awarded contract to erect residence; cost \$4000. Tenn., St. Elmo.—Dick Averett awarded contract to erect residence; two stories; cost \$5000; plans by Huntington & Sears, Chattanooga.

Tex., El Paso.—Mr. Ball awarded contract to L. F. Clark, El Paso, to erect residence; six rooms; cost \$3000.

Tex., El Paso.—W. B. Gillespie awarded contract to J. C. Worthington, El Paso, to erect residence; colonial style; nine rooms;

Ky., Catlettsburg.—Boyd county awarded contract to Stewart Iron Works, Cincinnati, ton, to erect residence; cost \$16,000 to \$18,000.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

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Tex., San Antonio.—W. A. Coeke awarded contract to National Building & Investment Co., San Antonio, to creet eight two-story dwellings; also residence in Almo Heights.

GOVERNMENT AND STATE

D. C. Washington—Pontoon Shed.—W. J. Barden, Major Engineer, awarded contract to M. F. Piper at \$15,166 to erect pontoon shed at Washington Barracks. (Recently noted.)

HOTELS

Fig., Tampa.—James H. Miller will expend \$21,000 to creet hotel; 94x94 feet; brick; electriet lighting; plans by Bonfoey & Ellicit. Tampa; contract recently noted awarded to Bates & Hudnall, 2 Gould Bidg., Tampa.

Tex., Rockport.—Rockport Hotel Co. awarded contract to L. W. Gillette of Beeville Tex., to erect hotel; fireproof; brick; sur rounded by verandas; will also construct wharf and bathing-house. (Recently noted.)

Tex., El Paso.—El Paso Hotel Co. awarded contract to Miller & Sons of New York and Pittsburg, Pa., to erect proposed hotel at El Paso and San Antonio Sts.; eight stories; mezzanine floor: 140,000 square feet floor space; cost 345,000.

Tex., El Paso.—William Miller & Sons Company of Pittsburg, Pa., has general contract to creet proposed hotel.

MISCELLANEOUS

Ala., Troy — Stable. — Samuel J. Stark awarded contract to Troy Lumber & Construction Co., Troy, to erect livery stable: dix15e feet; cost \$250; plans by E. A. Damon, Jr., Troy.

La., Donaldsonville—Clubreoms, Billiard Hall, etc.—F. Rogge wil expend \$6000 to erect billiard hall, clubrooms, etc.; 46x68 feet; semi-fireproof construction; contract recently noted awarded to W. C. Hazilp, Donaldsonville, (See "Machinery Wanted.")

wille. (See "Machinery Wanted.")
Md., Baltimore—Home.—Betsy Levy Memorial Home awarded contract to John S. Busick, 2811 Rayner Ave., Baltimore, to improve home at Breadway and Eastern Ave., including retaining wails, concrete, stone and brick work and rearranging interior; cost about \$2000; plans by Theodore Wells Pietsch, American Bidg., Baltimore, (Recently noted.)

Md., Baltimore—Hospital.—Maryland University Hospital, Lombard and Greene Sis., awarded contract to J. Henry Smith, 1426 Light St., Baltimore, to erect addition to kospital; one story; brick and stone; metal relling; hardwood flooring; 18x20 feet.

Md., Baltimore — Stable. — Maryland Construction Co. Is having plans prepared by M A. Long, 6 Elmhurst Rd., Roland Pack, Md. for stable at Oak and 21st Sis.; two stories, frame; 27x102 feet; cost \$2000; awarded contract to L. C. Woods.

Md., Baltimore—Parisa-house,—Protestant Episcopal Church of Holy Nativity, Rev. Hugh W. S. Powers, rector, awarded contract to A. F. Nicholson, Ferndale Ave, near Norwood Ave., Baltimore, to creet parishhouse; brick; 44x88 feet; cost \$10,000; plans by Alfred Mason, 746 W. Baltimore St., Baltimore, (Recently noted.)

Tex., El Paso Restaurant, Sheldon Hotelias plans by and awarded contract to Harry Corning, 1112 Rio Grande St., El Paso, to erect restaurant; two stories and basement; press brick; ordinary construction; cost \$4400.

Va., Roanoke—Car Barn.—Roanoke Railway & Electric Co. awarded contract to C. W. Hancock & Sons, Lynchburg, Va., to erec proposed car barn and repair shops; storage barn 100x225 feet and another building in rear to contain machine shop 45x95 feet, carpenter shop 35x92 feet and paint shop 35x92 feet; brick; concrete roofs; fireproof; eight tracks in storage barn, four of which extend through shop building; cost \$75,000.

Va., Roanoke - Morgue. - John M. Okey Company awarded contract to R. K. Stewart, First National Bank Bidg., Roanoke, to erect morgue: three stories; tile and terrazzo Foors; vitrolite and marble wainscot: electric lighting: elevator: plans by Huggins & Bates, Roanoke. (Recently noted.)

W. Va., Wheeling—Market Auditorium.— Market Auditorium Co. awarded contract to Perkins & Jackson, Wheeling, to erect market and auditorium building; 518x40 feet; two stories; auditorium portion 185x53 feet; fireproof construction; cost about \$150,000; plans by F. F. Farls, Wheeling. (Recently noied.)

RAILWAY STATIONS

t.a., Hammond.—Illinois Central Railroad Co. awarded contract to George B. Swift Company, Chicago, Ill., to creet depot; 271½x 208 feet; ordinary construction; electric lighting; hot-water heat; cost \$30,000. (Previously noted.)

Md., Cumberland.—Baltimore & Ohio Rallroad Co., F. L. Stuart, chief engineer, Baltimore and Charles Sts., Baltimore, Md., awarded contract to P. Farrell, Cincinnati, O., to remodel Queen City Hotel; to incinde rearranging hotel building, placing hotel office in east end of building and using vest end for passenger station; new baggage and express building erected in rear; waitingroom 56x43 feet; cost 359,000; construction to begin at once. (Recently noted.)

Md., Cumberland.—Baltimore & Ohio Railroad, F. L. Stuart, chief engineer, Baltimore and Charles Sts., Baltimore, awarded contract to P. Farrell, Cincinnati, O., to remodel Queen City Hotel for station, etc.; erect freight depot and construct sulway at Harrison St. crossing; total estimated cost of improvements about \$150,000.

Mo., Kansas City.—George A. Fuller Company, Fuller Bidg., New York, general centractor for union station, awarded contract to Stroebel Steel Construction Co., Chicago, to erect 14,000 tons of steel work in this structure, which was recently fully described.

Tex., Dermott.—Roscoe, Snyder & Pacific Railway, E. S. Hughes, general manager, Abilene, Tex., awarded contract to Mr. Whitescarver, Snyder, to erect proposed denot

SCHOOLS

Ala., Birmingham. — Board of Education awarded contract at \$645 to Joy Construction Co., Birmingham, to erect addition to Fairview school, and at \$527.78 to Selman Heating Co., Birmingham, for plumbing, and at \$113 to Frutticher Electrical Co., Birmingham, for electrical work.

Ala., Birmingham, — Miles Memorial College, Rev. J. Albert Bray, president, awarded contract to C. W. Hadnott & Sons, Birmingham, to erect boys' dormitory; cost \$32,000, (Recently noted.)

Alia. Opelika.—Lee County Commissioners awarded contract to M. P. Craver, Opelika, to erect Lee county high-school building; two stories and basement; brick; four classrooms on each floor; cost \$8500. (Previously noted.)

Ark., Marion.—School Board awarded contract at \$21.215 to J. E. Hollingsworth & Co. Memphis, Tenn., to creet school; reinforced concrete and brick; seating capacity 500; eight classrooms and auditorium, superintendent's room, clonkrooms, etc.; waterworks, heating plant, electric wiring; plans by Weathers-Poley Company, Memphis, Tenn.

La., Folsom,-City awarded contract to creet proposed high-school building.

La., Labadieville, — Assumption—Parish School Board awarded contract at \$14,575 to Corbin Bros., Jonnerette, La., to erect twostory-and-basement brick school. (See La., Napoleonville.)

La., Napoleonville, — Assumption Parish School Board awarded contract at \$14.575 to Corbin Bross, Jeanerette, La., to erect twostory and basement brick school at Labadderville, La., and to same contractors to creet amov and basement at Napoleonville High School, and to Justillen Duz to erect St. Vincent's School. (Recently noted.)

La., New Orleans.—City awarded contract at \$51,290 to Reusch Construction Co., New Orleans, to erect school at Poplar, Lowerine, Jeanerette and Pine Sts.; two stories and bacement; at \$10,780 to John O. Chisolm & Co., New Orleans, to erect annex to B. M. Palmer school; two stories and basement; frame. (Recently noted.)

Md., Baltimore.—Bryn Mawr School, Pres ton and Cathedral Sts., awarded contract to John E. Marshall & Sons, 121 Mercer St. Baltimore, to creet addition to school frame: 18x18 feet; slate roof; concrete foun dation.

Miss., Jackson.—St. Joseph's Academy awarded contract to H. K. Hardy, Jackson. to erect two-story school building; 50x120 feet; cost \$6000.

N. C., Greensboro.—Greensboro Female College awarded contract to John T. Hunt of Greensboro to creet dormitory; cost \$25,000; contract for heating and plumbing let to B. McKensie and Hunt Bros., both of Greensboro. (Recently noted.)

N. C., High Point.—School Board, A. E. Tate, member of committee, awarded contract to erect school building; 70x90 feet; brick veneer on frame; hot-air heaf; cost \$10,000; plans by Charles W. Barrett, Raleigh and Winston-Salem, N. C. (See "Machinery Wanted.")

Okla., Oklahoma City.—Board of Education will expend \$30,000 to erect Edgemore school; 65x90 feet; fireproof construction; heating and lighting not in contract; plans by Layton & Smith, Oklahoma City; contract recently noted awarded to Oklahoma Quarries & Construction Co., Oklahoma City.

Tex., Frisco.—Frisco Independent School District awarded contract to L. M. Miller, McKinney, Tex., to erect school building: 84x84 feet: three stories; eight rooms and auditorium: fireproof construction: hot-air heat; cost \$11,600; plans by Sparger & Peters, Bonham, Tex. (Previously noted.)

STORES

Ala., Birmingham.—W. N. Malone awarded contract to J. B. Anderson, Birmingham, to erect building at Second Ave. and 24th St.; two stories; brick; cost \$10,125.

D. C., Washington.—F. G. Smith Piano Co. awarded contract to S. J. Prescott Company, 814–13th St. N. W., Washington, to erect piano store; iron front in first story; plans by A. P. Clark, 816–74th St. N. W., Washington, (Recently noted.)

Gn., Atlanta.—Point Peachtree Company, C. E. Caverly, president, awarded contract to W. H. George, Atlanta, to erect building for wholesale provisions; mill construction; 75x170 feet; cost \$15,000; plans by E. E. Dougherty, Atlanta.

Tex., Bryan.—C. E. Jenkins, Bryan, has contract to erect two-story brick addition to Smith Bldg.

Ga., Wayeross.-Mrs. M. M. Crawley awarded contract to erect business building; three stories; concrete.

Ga., Waycross.—Thomas & Smith awarder contract to erect three-story brick business building.

La., New Orleans,—Louis Winsor awarded contract to Petty & Erwin, Room 312, 527 Canal 84. New Orleans, to erect business building; four stories; 24x129 feet; ordinary construction; cost \$8000; heating and lighting not in contract; plans by Gordon 8. Levy, 717 Hennen Bidg., New Orleans; construction begun. (Recently noted.)

Md. Baltimore.—Benjamin Mayer, 522 N. Gay St., will expend \$15,000 to erect store; 46x100 feet; ordinary construction; steam heat; passenger elevator; plans by John Freund, Jr., 210 E. Lexington St., Baltimore, Md.; contract (recently noted) awarded to William H. Porter & Son, 505 Forrest St., Baltimore.

Miss., Osyka.—Chester A, Mixon awarded contract to A. T. Moore, Osyka, to erect business building; one story; pressed brick; glass front.

N. C., Concord.—M. L. Marsh awarded contract to R. A. Brown's Sons to erect 35x65 foot store building; cost \$2200. (Recently noted.)

S. C., Orangeburg.—W. G. Bryant awarded contract to J. S. Mitchell, Orangeburg, to creet building: 72x10 feet; ordinary construction; cost 36000; plans by Edward Hawes, Jr., Orangeburg; foundation being laid for three-story building with view to addition later. (Recently noted.)

Tex., Bryan.-C. E. Jenkins has continued to erect addition to Smith Building; two stories; pressed brick.

Tex., Buckholts.—D. R. Criswell has plant by and awarded contract to T. P. Allen, Rodgers, Tex., to erect store; 30x90 feet; ordinary construction; cost \$3000. (Recently noted.)

Tex., Buckholts.—Frank Stach awarded contract to T. P. Allen, Rodgers, Tex., to erect store building recently noted.

Tex., Fairfield.—Martin & Hubbard have contract to erect five business buildings; brick.

Tex., Houston.—Jesse H. Jones awarded contract to W. H. Young, Houston, to erect store building; 50x100 feet; there stories; mill construction; low-pressure steam heat; freight elevator; plans by Mauran, Russell & Crowell, St. Louis, Mo.

Tex., Rockdale.—Rotan Grocery Co. of Waco, Tex., awarded contract to U. M. Rich ardson, Rockdale, to erect business buildings 50x150 (cet; 50-foot busement; cost 875/0.

Va., Norfolk. -- Mercantile Improvement Corporation will expend \$25,000 to erret store: H3x55 feet; mill construction; hotwater heat; plans by Ferguson, Calrow & Taylor, Norfolk; contract awarded to Vgga & Richardson, 340 Withers Bidg., Norfolk, (Recently noted.)

W. Va., Wheeling.—McDonald Bros. have contract to erect addition to building at 104 15th St.; three stories; brick.

THEATERS

Md., Cumberland.—Wertheimer Bros, awarded contract to J. L. De Haven, Cumberland, to erect theater, office and lodge building; three stories; 26x26 feet; brownstone, brick and steel; fireproof; theater on first floor to sent 600; offices on second floor and lodge-rooms above; practically fireproof; stem heat; natural gas and electric lighting; cost \$15,000; plans by Wright Buther, Cumberland, Tex., Waco.—Mrs. G. D. Streoter awarded contract to erect theater.

WAREHOUSES

La., Maxie,—Farmers' Warehouse Co., F. M. Brossart, president, awarded contract to John Prejean, Rayne, La., to erect rice warehouse: 66x20 feet; ordinary construction; cost \$420: plans by J. Gould, Rayne, La. (Recently noted incorporated with \$5.00 capital stock.)

Va., Richmond. - John E. Carr, Richmond, has contract to erect warehouse for Furran Company on Ash St. wharf,

W. Va., Williamson.—Juhling Bros, awarded contract to Met'onnell Bros, of Williamson for brick work, and J. H. Jamison, also of Williamson, for wood work in erection of moving-picture theater recently noted: 2528 feet: ordinary construction; steam heat; cost \$4500. (See "Machinery Wanted.")

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Albertville,—Mayor J. R. Sherman advises that there has not been any survey made for an electric railway near Albertville, this referring to report that the construction of such a line was in contemplation.

Ala., Birmingham.—P. S. Briggs, secretary of the Birmingham, Ensley & Bessemer Ralirond, is quoted as saying that it is expected to have ears running between East Lake and Bessemer by March 1. When that part of the road is completed, work on the extension of the tidewater line from Birmingham to Gadsden and on the south to Tuscaloosa will be undertaken. J. H. Morris of Philadelphia is president.

Ark., Little Rock.—Business men of Little Rock are reported to have adopted a resolution urging the St. Louis & San Francisco Rullroad to extend its system so as to run a line to and through Little Rock. F. G. Jonah is chief engineer of construction at St. Louis, Mo.

Ark., Gould.—Official: The Gould Southwestern Railway Co. proposes building extensions from Star City to Holly Springs and from Gould to Pendleton, 60 miles. Connections will be made at New Edinburgh with Sailne River Railway; at Fordyce with Rock Island, Cotton Belt and Fordyce & Princeton Railway: one mile north of Draughon with Thornton & Alexandria Railway, and east of Holly Springs with Free Valley Railway. The country is rolling. Date for opening bids for construction and equipment not yet determined. Samuel New-

house, New York city, is president: T. 8. Estabrook, Chicago, vice-president: S. 6. McClellan, trensurer, and S. G. McClellan, secretary, both of Gould, and E. C. Buchanan, Little Rock, Ark., chief engineer.

Ark., Malvern.—The Rock Island system. It is reported, will open bids September 15 for construction of a line from Kent to Malvern, 75 miles. J. B. Berry is chief enginer at Chicago, III.

Fla., Bartow.—Construction is reported begun on an extension of the Scaboard McLine from Mulberry to Bartow, eight miles W. L. Seddon is chief engineer at Portsmouth, Va.

Fig., Century,—The Alger-Sullivan Lumber Co. of Century, Fig., it is reported, proposes building an extension of its logging line from a point in Monroe county, Alabama. To a point in Conecuh county, Alabama. Sullies, the line to include five or six pile its stated, are about to be let. The officers of the lumber company are J. H. Millen, president, Duluth, Minn.; M. H. Sullivan, vice-president, Pensacola, Fig., and Edward A. Hauss, treasurer, Century, Fig.

Fla., Dunnellon.—Survey is reported being made for the Atlantic Const Line for a line from Dunnellon northward through Levy county, crossing the Senbourd tracks at 0t-ter Creek. The line will pass through limber lands owned by the Florida Syndicate, Florida Land Co., Cummer Lumber Co., Cartet Land Co. and Dixon Company, E. B. Pleasants is chief engineer at Wilmington, N. C.

Fla., Tampa.-The Tampa, Okeechobee &

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Gulf Railroad is reported to have awarded contract to W. K. Palmer Company, enginers of Kansas City, for building its proposed line between Tampa and Fort Stockton; work to begin soon. Henry C. Ferriot of New Orleans is president with temporary effices in the Hampton Bidg.

offices in the Hampton Bidg.

Ga. Augusta.-W. J. Oliver of Knoxville, Tenn. quoted as saying that active building operations on the Savannah. Augusta & Northern Railroad will be resumed immediately, and the road completed to Knox-

rille.

Ga. Brooklet.—The Shearouse Lumber Co., John N. Shearouse, president, proposes, according to press dispatches, to extend the Shearwood Railway from Brooklet, Ga., to Claxton, Ga., about 60 miles.

Claston, Ga., about 90 miles.

Ga., Elberton.—Surveys for the proposed Elberton & Eastern Railway are reported completed as far as Tignall. The line is projected to run from Elberton, via Tignall, in Wilkes county, to Amity, in Lincoln county, 40 miles. W. O. Jones, president of the Elberton & Eastern, advises that informed the county of the county of the county. tion cannot now be given.

Ky., Louisville,—The Kentucky & Indiana Terminal Railroad Co., proposes to build more tracks and double its yard capacity at Yamgstown, besides building a new double-track bridge. W. M. Mitchell is manager and chief engineer at Louisville, Ky.

Mountain Railway (Louisville & Nashville Railread) is reported completed and in operation to Benham, Ky., on Looney's Creek, Stimles, The road opens up coal and timber land. W. H. Courtehay is chief engineer of the Louisville & Nashville at Louisville, Ky.

of the Louisvine & Sassivine at Louisvine, sy.

Ky., Paducah.—Press dispatches state that
as soon as subscriptions in Paducah are finished the Kentucky Southwestern Electric
Railway, Light & Power Co. will put engineers in the field. H. C. Rhodes of Paducah
is president and W. A. Caihoun of Buffalo,
X. Y., chief engineer.

Ky., Paducali.—The Kentucky Southwest-ern Electric Railway, Light & Power Co. has established offices at 609 and 610 City National Bank Bidg., with C. W. Williams in charge. E. F. Wheaton of Henderson, in charge. E. F. Who Ky., is also interested.

Ky., is also interested.

La., New Iberia.—L. M. Linnan of Baton Rouge, it is reported, has been awarded contract to grade the Iberia, St. Mary & Eastern Railway, of which F. M. Welch is president. Sub-contracts are being iet. Line will run from New Iberia to Jeanerette, Charenton, Franklin and Berwick, La., 50 miles.

Md., Cumberland.-The Western Maryland Md., Cumberland.—The Western Maryland Railroad Co., it is announced, has bought about 30 lots in Ridgely, and it is rumored that more construction is planned in connection with the extension to Connelisville, which is fast approaching completion. Counsel for the company declined to make any statement about the proposed use of the property. II. R. Pratt, Baltimore, is chief engineer.

Md., Ellicott City.-The United Railways Md. Efficient City.—The United Railways & Electric Co. is reported considering the proposition of extending its line from Elli-coll City to St. Charles College, Howard county, five miles. Wm. A. House of Balti more is president

more is president.

Md., Hagerstown. — The Hagerstown & Clearsprings Electric Railway Co. is reported to have applied to the Commissioners of Washington county for right of way over the county road from Hagerstown to the Pennsylvania State line. The company also proposes constructing an electric line from Hagerstown to Maugansville and Middleburg, Md., and Greencastle and Mercersburg, Pa.

Md., Millersville,—The Baltimore & Virginia Railway Co., it is reported, has been granted permission by the Public Service Commission to issue \$1,000,000 in stock and commission to besue \$1,000,000 in stock and \$50,000 in bonds, proceeds to be used in the construction of a line from Millersville, Anne Arundel county, to Drum Point, in Calvert county, on the Patuxent River. About 12 miles of the roadbed between Millersville and Davidsonville are graded, and it is stated tracklaying is to begin immediately. Littleton B. Sturgis, Gaither Bldg., Baltimore, is president.

Mo., Chillicothe.—Steps are reported being taken by citizens of Chillicothe and Trenton. Mo., and farmers between the two cities to secure right of way for the proposed electric railway to be constructed from Cainesville, Mo., to Chillicothe, about 47 miles. An Eastern company, it is stated, will finance the road

Mo., Kadsas City.—The Wyandotte Construction Co., operated by the Townsend-Arnold syndicate, contractor for the Kansas City, Clay County & St. Joseph Interurban Railway, must, it is reported, have the road-

bed ready for use by January 1, 1913. A sub-contract for grading, it is stated, is about to be let.

Mo., Springfield.—The Springfield & Western Railway, incorporated with \$2,000,000 capital to build a line from Springfield west through Paris Springs, Mount Vernon and Carthage to Joplin, Mo., has applied for franchise, it is reported, to operate a line in Springfield. II. D. Mackay is president: I. N. Smith, vice-president: J. P. McCammon, secretary, and J. T. Woodfill, treasurer.

N. C., Fnyetteville,—The Aberdeen & Rock-fish Railroad, extending from Rockfish to Treefall, will, it is reported, be extended to Fnyetteville, John Blue is president and general manager at Aberdeen, N. C.

geheral manager at Aberdeen, N. C.
Okla., Ardmore.—An official letter denies
report that the Chicago, Rock Island & Pacific Rallroad Co. will build an extension
from Ardmore, Okla., to Waurika.

Okla., Arapaho.—A dispatch says that a railroad to be called the Arapaho & Northwestern may be built from Arapaho via Putnam, Taloga and Seiling to Westmoreland on the Santa Fe system, Arapaho being on the Frisco. The Mayor may be able to give information.

Okla., Cheyenne.—Permanent surveys are reported being made by the Wichita Falls & Northwestern Railroad for a line into Chey-enne. R. A. Thompson is chief engineer at Wichita Falls, Tex.

Okla., Clinton.—The Clinton & Oklahoma Western Railway is reported surveying for a route from Clinton, Okla., to this place, the line, it is stated, to be completed by May, 1812. Guy V. McClure is chief engineer at Oklahoma City.

8. C., Bamberg.—Tracklaying is expected to begin soon, it is reported, on the pro-posed rallroad from Bamberg, S. C., to Ehr-hardt. Jones A. Williams of Bamberg is sald to have the contract.

8, C., Cheraw.—The Bennettsville & Cheraw Ralirond has been authorized to operate its recently-completed extension from Browns-ville to Sellers, II miles, making the line 43

8. C., Easley. – Work on the Anderson, Abbeville and Easley Railrond from Abbeville to Easley, 60 miles, will, it is stated, soon be started. M. N. Patterson is reported to be making surveys, estimates and securing rights of way. New York capital, it is said, will finance the road.

will finance the road.

Tenn., College Grove.—John Wilkes, chief engineer of the Middle Tennessee Traction Co., 2 Berry Block, Nashville, Tenn., says that the line to be built is 40 miles from Shelbyville to Franklin, Tenn., via College Grove, including one bridge of 50 feet span. Route is level. McLaughlin & Company of Franklin have the contract, and 5½ miles are now graded. P. E. Cox of Franklin is president, and D. A. Proctor, general manager and consulting engineer.

president, and D. A. Froctor, general manager and consulting engineer.

Tenn., Chattanooga,—The Cincinnati, New Orleans & Texas Pacific Railway (Queen & Crescent Route) will, it is reported, purchase more land and enlarge its local yards soon. C. Bougherty is chief engineer at Cincinnati, O.

Tenn., Jonesboro,—A. P. Shipley, secreary, Board of Trade, Jonesboro, Tenn., writes confirming the report that boads were voted in aid of the proposed interurban line from Jonesboro. Tenn., to Johnson City, Tenn., seven miles. Connection will be made with the Johnson City Traction Co. Electric or gasoline cars will be used. Company not yet organized or named.

organized or named.

Tenn., Knoxville.— Reported that work upon the extension of the Southern Railway's track along the north side of the Tennessee River to reach marble quarries is about to be started. The line when completed will be six and one-half miles long, extending from the center of Knox county to the marble quarries. W. H. Wells is chief engineer of construction at Washington,

Tex., Comanche.—Reported that the Hamilton-Comanche extension of the Cotton Belt Route is now in operation.

Tex., El Paso.—Construction is reported begun on the San Diego, El Paso & St. Louis Railroad from Artesia to Hope, N. M., 25 miles. A. Courchesne is president and W. H. Winter secretary, both at El Paso.

Tex., Fort Worth.—A dispatch quotes G. H. Clifford, general manager of the Northern Texas Traction Co., as saying that work on the Fort Worth and Cleburne interurban railway will begin by October 1, and that the construction contract will be let in a few days.

ing laid at the rate of about five miles per week, and it is now ready to operate 45 miles beyond Mertzon. It will probably be completed from San Angelo to Fort Stock-ton, Tex., 164 miles, by January 1, and to Alpine, 65 miles beyond, a few months later.

Tex., Quanah.—The Quanah, Acme & Pacific Railroad has, according to press dispatches, completed arrangements for financing the extension westward from Paducah to El Paso. The line is now in operation from Quanah to Faducah, 43 miles. C. E. Ensminger is second vice-president and general manager at Quanah.

Tex., San Antonio,—The San Antonio, Rock-pert & Mexico Railroad, says a dispatch, has appointed a committee consisting of C. S. Fowler, J. G. Fowler, A. L. Matlock and J. G. Rives to ask bonness of \$5000 per mile for the proposed route. The line will connect San Antonio and Rockport, and will also extend to Rio Grande in Hidalgo county,

Va., Bristol.—Press dispatches state that the Bristol Belt Line Railway has amended its charter changing its name to the Bristol Traction Co. and increasing the maximum capital from \$100,000 to \$300,000 and the mini-

Va., Fredericksburg, — Preliminary survey is reported completed for the proposed Richmond & Northern Neck Ralfrond to Sandy Point, at the mouth of the Wicomico River on the Chesapeake Bay, and it is said locating survey is to begin immediately.

Va., Tappahannock.—The Chamber of Commerce is reported to have under consideration a proposition submitted by J. C. Robinson for the development of an electric line from Tappahannock to Urbanna. The plants said to include the purchase of the Seven Pines line from the Virginia Railway & Power Co.

W. Va., Charleston.—The Standard Con-tracting Co. of Charleston is reported to have been awarded contract by the Charles-ton & Dunbar Traction Co. for building its proposed line between the points named.

W. Va., Keyser.—Work, under the direction of L. C. Thomas, is reported under way on the proposed Twin Mountin & Potomac Railroad, which is to be built from Keyser to Twin Mountain, 25 miles.

STREET RAILWAYS

Ark. Fayetteville.—Reported that it is proposed to build a street railway from the university to the East Mountain, passing through the business part of the city and the leading residence district. W. A. Fraser and Dr. M. E. Taber of Dallas, Tex., are said to be the promoters.

Ark., Fort Smith.—Work of rebuilding the Fort Smith Light & Traction Co.'s line from Front St. to 13th St. is reported under way. Eighty-five-pound rails are to be used and the work is estimated to cost \$60,000.

D. C., Washington.—Work of double-track-ng the Washington Railway & Electric Co.'s Congress Heights line is reported under way. Ga., Atlanta.—The Georgia Railway & Elec-tric Co. it is announced, will build an exten-sion to Ansley Park.

Ga., Valdosta.—George L. Patterson, representing local interests, says a dispatch, informed the City Council that application will be made at the next meeting for a new electric railway company, which proposes to hold about four miles of line.

Ky., Maysville.—The Maysville Street Railway is reported to be making extensive improvements to its line at a cost of about \$70.000. R. M. Wallingford & Son are reported to have been given contract by the company for filling the ravine between Carmel St. and Dietrich's Grove, thus eliminating wooden treatle.

La., New Orleans.—The New Orleans Rail-way & Light Co, contemplates building & able track on Common St, from Baronne to Rampart St.

to Rampart 81.

Mo., 81. Louis.—The East 8t. Louis City
Council is reported to have granted franchise
to the Southern Railway Co. to build a second track to its belt line around the southern
half of East 8t. Louis. W. H. Wells is chief
engineer of construction at Washington,

Tex., Austin.—Concerning the report that the Austin Electric Railway would build an extension and buy material, W. J. Jones, vice-president, advises "Nothing at present."

Tex., Corpus Christi.—The street-railway company of Corpus Christi, it is reported, proposes building an extension of their loop in the South Bluff portion of the city.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Air Compressor,—Scaled proposals, endorsed "Proposals for portable air compressor," received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 A. M. September 29, and then publicly opened, for portable air compressor and accessories for Navy yard, Norfolk, Va. Plans and specifications (No. 1819) can be obtained on application to bureau or to commandant of Navy-yard named. Wm. M. Smith, Acting Chief of Bureau.

Automobiles.-J. D. Wyrick, Lenoir City, can, wants prices on automobiles; view to

Bulusters.--W. C. Hazlip, Donaldsonville, a., wants prices on balusters.

La., wants prices on balusters.

Hlackboards.—Charles W. Barrett, Raleigh, N. C., wants prices on blackboards.

Bollers.—Allentown Equipment Co., 211
Commonwealth Bldg., Allentown, Pa., wants 175 to 200-horse-power horizontal return tubular complete; 66x18 to 72x18 horizontal return tubular complete, good for 110 to 125 pounds. Hartford inspection; 50 to 99-horse-power Economic portable or locomotive portable type, good for 90 to 100 pounds, complete.

Boller, etc.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C., will receive bids until September 26 for furnishing and erecting boller, smokestack, etc., schedule 3814; delivery Experiment Station. Annapolis, Md.: for copies apply to navy pay station nearest navy-yard.

Brewery Machinery.— Monumental

ranging in length from 34 feet to 95 feet, with 12-foot roadway; plans and specifications at office of County Clerk.

office of County Clerk.

Bridge Construction. Bartow County
Commissioners, G. A. Vench, chairman, Cartersville, Ga., will receive bids until neon
tectober 4 for construction of reinforced concrete arch bridge over big branch on Websters Ferry Rd.; structure to be 59 feet long
and have roadway 12 feet wide; plans and
specifications on file at courthouse; certified
check \$100.

check \$100.

Bridge Construction.—Wetzel County Commissioners, New Martinsville, W. Va., receives bids until 9 A. M. September 16 for construction of low-girder two-span steel bridge with concrete floor across Big Fishing Creek at Porters Falls; also bids on both stone and concrete abutments and plers; bids on stone or concrete work to state price per cubic yard; plans and specifications to be filed with bids; S. Myers, cierk.

Bridge Construction.—Bridge commit-

Bridge Construction .- Bridge commit Bridge Construction.—Bridge commit-tee will receive bids until noon October 4 to construct steel highway bridge over Cane River at Bermuda, La.: bids to be addressed to P. E. Prudhomme, president Police Jury. Natchitoches, La. and accompanied by certi-fied check for \$900; for copies of plans and specifications address Ira W. Sylvester, civil engineer, Alexandria, La.

runishing and erecting boller, smokestock, etc., schedule 3814; delivery Experiment Station. Annapolis, Md.; for copies apply to navy pay station nearest navy-yard.

Brewery Machinery. — Monumental Brewing Co., 3900 E. Lombard St., Baltimore, Md., will open bids October 1 to install equipment for brewery.

Bridges.—P. St. J. Wilson, State Highway Commissioner, Richmond, Va., receives bids until September 18 for construction of five steel bridges in Sussex county, Virginia.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

with clerk of Edgefield County Court; certified check \$500; W. G. Wills, supervisor.

Building Materials, etc.—Bem Price, 518-19 Empire Bidg., Birmingham, Ala., wants catalogues and prices on building materials, etc., of interest to architects.

Building Materials,—J. L. Strickland, Planters' Lumber Co., Greenville, Miss., wants lime, cement, plaster, sash, doors, etc. Give dealers' prices.

Building Materials.—Hook & Rogers, Charlotte, N. C., want prices on building materials, including stained cypress shingle roofing, hardwood floors, plumbing, etc.

Building Materials.—Charles A. Belisle, 343–3d St., Baton Rouge, La., wants prices on tile floor, plate glass and marble base for show windows.

Building Materials,—8t. John's Catholle Church, Rev. W. J. Teurlings, pastor, Lafayette, La., wants prices on granite, asbestos, face bricks, cement and I-beams.

Building Materials.—National Building & Investment Co., San Autonio, Tex., wants prices on building materials.

Building Materials.—Charles W. Barrett, Raleigh, N. C., wants prices on slate roofing, press brick, plumbing and lighting fixtures, mantels, acreens, hardware, tile floors and norch columns.

Building Materials.—Merchants' Broom Co., Jacksonville, Fla., wants building materials for factory and warehouse.

Building Materials.—Netherland-American Trading Co. (formerly Williams & Co.) the White House, Rotterdam, Netherlands, interested in American building materials.

Building Materials. — Hansberger-Stuart, Roanoke, Va., wants to correspond with manufacturers (with a view to representation) of lime, cement, fire-brick, tile, terracotta, pipe, metal and composition roofing, lumber, etc.

Building Materials.—Huggins, Bates & Cave, American National Bank Bidg., Richmond, Va., wants entalogues and prices from manufacturers of and dealers in building materials.

Cable.—Office of Chief Signal Officer, Dawson Olmstead, First Lleutenant, War Department, Washington, D. C., will receive bids until September 20 for furnishing 4000 feet of cable core, specification 449-B; in addition, to be covered with braid of best quality thread saturated with best quality compound; recled in 1000-foot lengths; 4 reels, No. 6, for above cable core; also 43,000 feet submarine cable, paper insulated, type No. 321, in accordance with signal corps, specifications Nos. 427-B and 96-B and drawing No. 166; to be recled in 8 5000-foot lengths and 13000-foot length; new reels will be required.

Cable.—Office Commissioners District of Columbia, Washington, D. C. Proposals will be received until September 18 at 2 P. M. for furnishing underground signal and telephone cable. Specifications and form of proposal may be obtained from Purchasing Officer, D. C.

Cars.—Pemberton Fuel Co. (Prince E Lilly, Glen Morgan, W. Va., to be addressed) wants prices on 25 mine cars of one and onehalf tons capacity.

Cars. - Choctaw Portland Cement Co. Hartshorne, Okla., wants description and prices (in first letter) on three and six-yard standard-gauge side-dump cars; new or second-hand.

Columns.-W. C. Hazlip, Donaldsonville La., wants prices on cast-iron or pipe columns.

Cement.-See "Building Materials."

Confectionery.—H. Hassewer, New England Bidg., Rue Nationale, Antwerp, Belgium, wants to correspond with manufacturers of confectionery with view to representation.

Cottonseed-hull Fiber.—Charles R. Fife, 424 Pierce Bldg., St. Louis, Mo., wants cottonseed-hull fiber.

Crane. — Pennsylvania Equipment Co., West End Trust Bidg., Philadelphia, Pn., wants second-hand 26-inch gauge locomotive crane; three to five tons capacity.

Crane. — Pennsylvania Equipment Co., West End Trust Bidg., Philadelphia, Pa., wants two to five-ton quick-handling standard-gauge locomotive crane.

Crank Shaper.—Office Commissioners, District of Columbia, Washington, D. C. Proposals will be received until 2 P. M. October 2 for furnishing and delivering 16-inch heavy back-geared motor-driven crank shaper. Specifications and form of proposal may be obtained from Purchasing Officer, D. C.

Dam and Spillway Construction.— City of McAlester, Okla., will receive bids until 2 A. M. September 29 for construction of earthen dam and concrete-lined spillway; plans and specifications prepared by City Engineer on file in office of J. M. Gannaway. City Clerk; bids to be in duplicate, one copy to be filed with City Clerk and one with Mayor; each bid to be accompanied by certified check for 2½ per cent. of bid submitted.

Dairy Equipment.—Wm. Eads Miller Company, Herndon, Va., wants prices on dairy equipment.

Doors.—Frontier Construction Co., Brownsville, Tex., will receive blds from manufacturers on one carlond of birch veneer doors 13₄ inches thick, 3x7, two panels, upper panel open, two solid panels.

Dredging.—U. S. Engineer Office, Charleston, S. C. Proposals for dredging canal between Charleston and McClellanville, S. C. received here until noon October 12, and then opened; information on application; G. P. Howell, Major, Engineers.

Dredging.—Bids received by Mississippi and Lafourche Drainage District, Donaldsonville, La., until 10 A. M. September 19 for dredging Bayou Verret from present location of dredge to point near Texas & Pacific Railway west of La Pice Station, about 4½ miles; contractor to have use of dredgeboat and outfit; certified check \$1600. For specification and further information apply Mississippi and Lafourche Drainage District, Donaldsonville, La.

Dredgebont.—Alexander C. Roesch, Bra dentown, Fla., wants to purchase dredge boat.

Dumbwaiter.—W. C. Hazlip, Donald sonville, La., wants prices on dumbwaiter. Electric Generator.—See "Engine, etc."

Electric Ventilators.—Juhling Bres.
Williamson, W. Va., want electric ventilators

Electric-Hight Plant.—Hazard Light & Water Co., Hazard, Ky., will want prices on medium-sized electric-light plant equipment.

Electric-light Fixtures. — James H Jamison, Williamson, W. Va., wants price on electric-light fixtures.

Electric-light Plant, etc.—Louis Shell, care The Subway, Columbus, Miss., wants information and prices on electric plant for 400 16 candle-power incandescent lights and three small passenger elevators; gasoline power.

Electrical Machinery.—Board of Managers City Water and Light Plants, C. H. Ellis, superintendent, 28 S. Adams St., Taliahassee, Fla., will open bids 8 P. M. September 25 for 300-kilowatt direct-connected outfit, with switchboard panel; specifications and information furnished at above office.

Electrical Machinery. — Alientown Equipment Co., 311 Commonwealth Bidg. Allentown, Pa., wants several outfits, ranging from 40-kilowatt to 200-kilowatt directconnected sets, for power lighting, either in 125 or 220 voltage; full descriptin and price

Electrical Machinery.—W. H. Dill. Okemah. Okla., will purchase machinery for electrical plant to develop 2000 horse-power: will use turbines on dynamos.

Electrical Machinery.—Southern Equipment Co., 3517–27th St., North Birmingham, Ala., wants 200-kilowatt generator; 60-cycle, two-phase, 2200-volt, alternating current; beited; panel switchboard complete; also generator, same as preceding, direct connected to engine, with panel switchboard complete; machinery warranted. Give full information in first letter.

Electrical Machinery. — Lake Side Steam Laundry Co., J. H. Huston, president, Lake Charles, La., will want dynamo for lighting and heating hand irons.

Elevators.—Alfred Giles Company, San Antonio, Tex., will receive bids on elevators.

Elevator. — Williams-Hartsock Company. 807 Fourth National Bank Bidg., Atlanta. Ga., wants prices on freight elevator.

Elevator.—Thornhill Wagon Co., Lyrchburg, Va., wants electric platform elevator for storage warehouse: platform 8x12, with capacity of about 3000 pounds; about 13-foot lift.

Engine.—Carpenter, Taylor & Co., Rutherfordton, N. C., want 8 to 10-horse-power steam engine.

Engine.-W. M. Taft, Mt. Gilead, N. C., wants second-hand 30 to 100-horse-power Corliss engine; good condition.,

Engine, etc.—Office of Commissioners, District of Columbia, Washington, D. C. Proposals will be received until 2 P. M. September 28 for furnishing and installing steam engine and electric generator in Armstrong Manual Training School. Specifications and form of proposal may be obtained from Purchasing Officer, D. C.

Engines, etc.—Square Deal Oil & Gas

Co., C. V. Bartels, president, Busseyville, Ky., wants prices on tankage and pumping engines.

Engines and Bollers.—Hansberger-Stuart, Roanoke, Va., wants to correspond with manufacturers (with a view to representation) of stationary engines and bollers.

Fertilizer.—Giltner Plantation Co., W. J. Giltner, president, Monmouth, Ill., wants prices on fertilizer composed of bone meal, nitrogen and potash.

Foundry Equipment.—Office Commissioners of District of Columbia, Washington, D. C. Proposals will be received until 2 P. M. September 28 for furnishing labor and materials for increasing and renewing equipment of forage shop of McKinley Manual Training School. Specifications and form of proposal may be obtained from Purchasing Officer, D. C.

Furniture.—Board of County Commissioners, Tulsa, Okla., receives bids October 4, 9 A. M., for furniture and fixtures for new courthouse; samples to be inspected on said date; plans and description obtainable from Winkler & MacDonald, architects; R. E. Curran, clerk; usual rights reserved.

Gasoline Engine.—East Kentucky Publishing Co., W. M. Hall, president, Whitesburg, Ky., wants prices on two to four-horse power gasoline engine.

Gasoline Engines.—See "Sewers, etc"

Glass Front.—J. U. Free, Homestead,
Fla., wants prices on glass front for store
building.

Hardware.—Mertens & Co., No. 19 Avenue Des 2 Tilleuls, Brussels, Belgium, went to correspond with manufacturers of hardware; view to agency.

Harness and Saddle-making Machinery.—Dave Brody, Boerne, Tex., wants addresses of manufacturers of or dealers in tools for harness and saddle-making.

Heating Plant.—Gilreath Manufacturing Co., Greenville, S. C., wants prices on steamheating plant.

Heating Plant.—Juhling Bros., Williamson, W. Va., want small heating system for motion-picture room. Heating Plant.—Charles W. Barrett, Ra-

leigh, N. C., wants prices on heating plant for \$10,600 school building. Heating Plant.—Charles A. Belisle, 343 3d St., Baton Rouge, La., wants prices on hot-water heating plant for six rooms and

two stores.

Heading Plant.—John W. Staples, Room 5 Caldwell Block, Harriman, Tenn., wants information on establishment of plant to manufacture loose heading: about 2000 sets dails:

cter of plant, machinery, market, etc

Hoisting Engine. -- Choctaw Portland Cement Co., Hartshorne, Okla., wants description and prices (first letter) on new or second-hand 10-horse-power double-drum hoisting engine.

Hoisting Machinery.—Allentown Equipment Co., 311 Commonwealth Bidg., Allentown, Pa., wants 25x48 double cylinder, drum 8 feet diameter by 8 to 10-foot face, with brake band in middle, suitable for double-shaft hoisting; also four 9x12 or larger double cylinder, single or double drum, friction or reversible link motion, or combined, skeleton hoisting engines.

Hotel Furnishing.—Southern Baptist Assembly, B. W. Spilman, general secretary, Blue Mont, N. C., will want information and prices on kitchen and other hotel furnishings.

Hydro-electric Plant.—Proposals received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. October 9 for plant and materials for hydro-electric station at Gatun, including water turbines, governors, head gates, penstocks, compressed-air regulators, electric generators, exciters, exciter sets, lubricating system, traveling cranes, etc. Blanks and general information relating to this circular (No. 648) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York city; 614 Whitney-Central Bidg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engineer offices in following cities: Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Leuis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, and Chamber of Commerce and Board of Trade, Tacoma. F. C. Boggs, Major, Corps of Engineers, U. S. A., General Purchasing Officer.

Ice Machinery.—Wm. Eads Miller Company, Herndon, Va., wants prices on equipment for ice plant. Iron Ore.-Variety Works Company, Day, son, Ga., wants oxide of iron (iron ore).

Irrigation System.—Medina Irrigation Co. (controlled by Dr. F. S. Peurson, 25 Broad St., New York), Box 1140, 8an Antonio, Tex., invites correspondence from contractors with view to submission of bids soon after October 1 far work on irrigation system at Rio Medina, Tex.; total of main canal excavation about 120,000 cubic yards; contract sections to average about 120,000 yards per section; distributing system, in addition, about 100 ndissecondary canals and lateral ditches; preliminary profile, subject to modification, available for inspection; full specifications available later.

Kitchen Equipment.—See "Hotel Fun nishings."

Lathe.—Proposals received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. Septemier 26 to furnish at Navy-yard, Charleston, S. C., an engine lathe. Applications for proposals should refer to schedule 3896. Blank proposals furnished upon application to navy pay office, Charleston, S. C., or to bureau, T. J. Cowie, Paymaster-General, U. S. X.

Lathing. - Frontier Construction Co. Brownsville, Tex., will want bids on 24-gauge one-half-inch mesh metal lathing.

Laundry Machinery.—J. D. Wyrick, Lenoir City, Tenn., wants addresses of mainfacturers of laundry machinery.

Level Construction.—Proposals will be received by Board of Levee Commissioners, Orleans Levee District, No. 201, New Orleans Court Bidg., New Orleans, Lu., until 8 P. M. September 27 for construction of pile bulk hend about 1900 feet long between Eganh and Alabo Sts.; deposit \$250. For bidders' blanks and further information address board; Jules C. Koenig, president.

Levee Construction.—St. Francis Leve Board, O. N. Killough, president, Marion Ark., will receive bids until noon October? for construction of loop levee, one mile abor Pecan Point, to contain about 100,000 cube yards. Further information can be obtained from B. G. Covington, chief engineer, 28 Randolph Bidg., Memphis, Tenn.

Lime .- See "Building Materials"

Lighting Fixtures.—Board of County Commissioners, Tulsa, Okla., receives bids 5 P. M. October 3 for lighting fixtures for new courthouse; samples to be inspected 0stober 4; usual rights reserved; plans and specifications obtainable from Winkler & MacDonald; R. E. Curran, clerk.

Linen.—Mexican & Indian Drawn Work Co., El Paso, Tex., wants prices on linen.

Locomotives. — Pemberton Fuel Ca. (Prince E. Lilly, Glen Morgan, W. Va., to be addressed) wants prices on 10 to 15-tm 35 or 42-inch-gauge locomotives.

Locomotive.—Snowbird Valley Railway Co., Andrews, N. C., wants to lease for two years three-foot-gauge geared locomotive (Heisler, Climax or Shay) for steel rail.

Locomotive.—Choctaw Portland Cement Co., Hartshorne, Okla., wants description and prices (first letter) on 10-ton locomotive; new or second-hand.

Machine Tools.—Southern Equipment Co., 3517 27th St., North Birmingham, A's. wants boring and turning mill, to swing about 72 inches; engine lathe, 35 or 45-heb swing, about 18 or 20-foot bed; milling mechine, to cut one-inch keyways in heavy shafting; first-class condition. Give prices and information in first letter.

Machine Tools.—Conant Bros., Chineteague. Va., want prices on second-hand shaft lathe, buffer and keyseater.

Mantels.—James H. Jamison, Williamson, W. Va., wants prices on mantels.

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Metals.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C. will receive bids until September 28 for furnishing 16,800 pounds of crucible spring steel, schedule 3918; delivery Navy-yard, Washington, D. C.; for copies apply to navy pay offeen nearest navy-yard.

Metal-working Tools.—See "Tools."

Metal-working Plants.—See "Stee

Metals.—Navy Department, Bureau of Supplies and Accounts, Washington, D. C. will receive bids until September 26 for fur nishing \$400 pounds of medium steel ler. schedule 3923; delivery Navy-yard, Norfolk Va.; for copies apply navy pay office nearest navy-yard.

Metal-covered Window Frames, etc.
Department of Justice, office of R. V. La
Dow, Superintendent of Prisons, Washing
ton, D. C. Sealed proposals received in this
office until 10 A. M. October 2, then publicly
opened, for metal-covered window frames

pany. Daw Irriga: Pearson, Irrigation 1140,

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Hotel Far.

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respondence to submis-ther I for tio Medina, ation ale section; dis-ection; dis-ut two miles tches; pre-todification, weelfications

Milk Pails .- P. M. Creagh, 1504 Franklin manufacturers relative to manufacturing sanitary tin unspillable milk palls in sizes two, three and four gallons.

and sash, door frames and doors, exterior and interior finish, etc., for hospital build-ing, United States Penitentiary, Atlanta, Ga.

ies of specifications, with further infor

Copies of specincations, with antion at this mation, may be had upon application at this

Metal Lockers .- Office Commissioners,

Metal Lockers.—Office Commissioners, pistrict of Columbia, Washington. Proposals will be received until 2 P. M. September 5 for furnishing and installing 307 metal lockers in Armstrong Manual Training School. Form of proposal and specifications may be obtained from Purchasing Officer, D. C.

Mining Machinery.—Lion Mining & Miling Co., F. V. Wasserman, president, Seneca, Mo., will open bids September 15 to install mining machinery.

Motors.-See "Sewers, etc."

Moving-picture Machinery. - James H. Jamison, Williamson, W. Va., wants prices on moving-picture machines.

prices on moving-picture machines.

Navail Supplies.—Proposals received at Bareau of Supplies and Acounts, Navy Department. Washington, D. C., until 10 A. M. September 19 to furnish at Navy-yard, Norfolk, Va., naval supplies as follows: Schedule 390, controlling valves, rigging leather; schedule 3901, turpentine substitute, asphalmum varnish, marine cement; schedule 3902, trapentine substitute, asphalmum varnish, marine cement; schedule 3903, etc.; schedule 3904, brass valves. Applications for proposals should designate schedules desired by number. Blank proposals furnished upon application to navy pay office, Norfolk, Va., or to bureau. T. J. Cowfe, Psymaster-General, U. S. N.

Naval Supplies.—Proposals received at

Paymaster-General, U. S. N.

Yaval Supplies.—Proposals received at Burean of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. September 26 to furnish at Navy-yard, Washington, D. C., naval supplies as follows: Schedule 3949, trimming press; schedule 3912, furnishing and installing one water weigher. Applications for proposals should designate schedules desired by number. Blank proposals furnished upon application to the bureau. T. J. Cowie, Paymaster-General, U. S. N.

Navni Supplies.—Proposals received at Bureau of Supplies and Accounts, Navy Department. Washington, D. C., until 10 A. M. September 19, and publicly opened immediately thereafter, to furnish at Navy-yard, Washington, D. C., naval supplies as follows: Schedule 3897, oak ties, etc.; schedule 3898, steel forgings, cold-drawn steel, nickel steel; schedule 3899, North Carolina and white pine, shell bands, breech-closing springs, white rubber gloves, hardware, etc. Applications for proposals should designate schedules desired by number. Blank proposals furnished upon application to bureau. T. J. Cowie, Paymaster-General, U. S. N. Paymaster-General, U. S. N.

Office Supplies.—Mertens & Co., No. 19 Avenue Des 2 Tilleuis, Brussels, Belgium, want to correspond with manufacturers of office supplies; view to agency.

Oil-well Supplies.—Square Deal Oil & Gas Co., C. V. Bartels, president, Bussey-ville, Ky., wants prices on all necessary oilwell supplies.

well supplies.

Paving.—F. J. Von Zuben, acting City Engineer, Fort Worth, Tex., will receive bids until 9 A. M. September 16 for improvement of East 8th, Calhoun, Jones and Grove Sts., containing 3465, 2165, 2045 and 2045 square rards, respectively; material to be bituilthie, vitrified brick, rock asphalt or asphaltic concrete; certified check \$1000; forms of proposal and specifications on file with City Engineer; J. H. Maddox, Commissioner of Streets and Public Property; W. J. Estes, City Secretary. City Secretary.

Paving .- John J. Price, Charles E. E. rick and Wm. A. Glotfelty, street committee, Frostburg, Md., will receive bids submitted on forms supplied by Wm. Harvey, City Engi-neer, until 2 P. M. September 28 for grading and paving about 2000 feet of street; certified theck for \$200, payable to Mayor and City

Paving Blocks, etc .- Nevy Department, Bureau of Supplies and Accounts, Washington, D. C., will receive bids until September 25 for furnishing 20,000 asphalt paving blocks, sebedule 3917; furnishing and installing one water weigher, schedule 3912; delivery Navy

feet combined concrete curb and gutter and 25,000 cubic yards grading; plans, profiles, specifications, etc., will be on file at office of J. H. Freeland, Mayor, and at office of engineer, Gilbert C. White, Charlotte, N. C., and copies of specifications, form of proposal, etc., may be obtained from engineer after September 16; certified check for \$500; rights reserved.

Paving.—City Countil, Cedartown, Ga., will receive bids until October 3 for laying about 5000 feet of cement curb and gutter; specifications on file with H. N. Van De-vander, City Engineer; certified check \$250; M. D. Russell, Mayor. M. D. Rus

Paving.-City of Huntsville, Ala., will re celve bids September 19 to construct 1000 feet of asphalt or tarvia macadam pavement; C. D. Phillips, street superintendent.

Priving.—City of Farmersville, Tex., will soon let contract for street improvement consisting of concrete crossings, culverts and gutters; J. P. Huddleston, Mayor.

gutters; J. P. Huddleston, Mayor.

Paving.—Board of Commissioners of
Tulsa, Okla., will receive bids on proposal
forms furnished by City Engineer unti; 9
A. M. September 19 for paving 33 streets. alleys and avenues; two with brick, six with
brick and asphalt and remainder with asphalt; 125 blocks; 13 miles; certified check
for 5 per cent. amount of bid; plans and
specifications on file with City Engineer;
E. B. Cline, City Auditor.

Paving.—City Commissioners, Hunting-ton, W. Va., will receive bids until 1 P. M. October 5 for paving Buffington, 31st and 2d Sts. and three alleys with vitrified brick; plans and specifications on file with A. B. Maupin, City Engineer.

Paving.—Council committee on streets will receive bids at office of H. L. Sharer, City Engineer, Lynchburg, Va., until noon September 16; about 2000 square yards granolithic sidewalks and 1000 cubic vards excavation: plans can be seen, specifications and forms of proposals obtained at office of City Engineer: certified check \$500; A. R. Long. Engineer: hairman street committee.

Pipe.—Allentown Equipment Co., 311 Commonwealth Bidg., Allentown, Pa., wants about 15,000 feet 4, 5, 6 and 8-inch wroughtiron pipe, good second-hand condition; price and quantity desired in first letter.

Pine .- See "Rams, etc."

Planer and Matcher.-John G. Duncan Company, 398 W. Jackson Ave., Knoxville, Tenn., wants 24-inch heavy "Economist Frank" double-surface planer and matcher, with molding and beading attachment. Give jobbers' prices, immediate shipment.

Plaster.-See "Building Materials."

Pumps.-See "Sewers, etc."

Ratis.—Pemberton Fuel Co. (Prince R. Lilly, Glen Morgan, W. Va., to be addressed) wants prices on one to two cars of 12-pound and 25 to 60-pound steel rails.

Rails.—Choctaw Portland Cement Co. Hartshorne, Okla., wants description and prices (first letter) on 56-pound new and relaying rails.

laying rails.

Rams, etc.—M. C. Chamblee & Sons,
Wakefield, N. C., wants prices on small or
medium-sized double-acting hydraulic rams
with 1000 to 1300 feet three-quarter or oneinch galvanized pipe

Road Construction .- Bids received by County Commissioners, Anniston, Ala., until 12 M. October 4 for grading, draining and surfacing with chert or macadam approxi-mately three miles of State aid road; bids will be received at same time for grading, draining and macadamizing six miles of county road; plant and specifications on file at office of State Highway Department, Monte Compare, Alexander 1988, gomery, Ala., and with R. H. Cobbs, resident engineer, Anniston, Ala.; W. S. Keller, State Highway Engineer.

Road Construction.-Bids received by Road Construction.—Bids received by County Commissioners of Blount county, Alabama, Oneonta, Ala., until 12 M. October 3 for grading, draining and surfacing with chert one mile of State aid road; plans and specifications on file at office of State Highway Department, Montgomery, Ala., and with Probate Judge at Oneonta; W. S. Keller, State Highway Engineer.

Road Machinery. - Hansberger-Stuart, Roanoke, Va., wants to correspond with manufacturers (with a view to representation) of road machinery.

Road Work .- John M. Murch, County Auditor, Gaiveston, Tex., will receive bids until 11 A. M. October 1 for surfacing and shelling of county's roadway over earth part of causeway; 12,000 cubic yards of mudshell, in addition to grading; specifications in office

N. C., will want information and prices on

Saddle-makers' Tools,-See "Harne nd Saddle-making Machinery."

Safe, etc.—Bank of Nichols, Nichols, S. C., wants prices on safe, vault and other bank fixtures.

Sash and Doors .- See "Building Mate

Seating.—Charles W. Barrett, Raieigh, N. C., wants prices on seating for \$10,000 school milding.

Sewer Construction and Water-works.—Water and Light Commission, Newnan, Ga., W. B. Pringle, secretary, re-quests bids by September 2 for construction of 1500 feet 16-inch, 4800 feet 8-inch and 2000 feet 6-inch sewer lines; relaying 1400 feet 4-inch cast-iron pipe with 8-inch, and laying 3000 feet 4-inch cast-iron water mains.

Sewer Construction.—City Commissioners, Huntington, W. Va., will receive bids until 1 P. M. October 5 for construction of 10-inch tile sewer in one alley and 12-inch tile sewer in three alleys; plans and specifications on file with A. B. Maupin, City Engin certified check \$500.

Sewers, etc.—City of Lake Charles, La., will open bids September 18 (extended date) to construct 27 miles of sewers with four re-inforced concrete tanks, pumping station, two centrifugal pumps, two motors or two gasoline engines, cast-iron pipe, etc.; separate bids received; Walter G. Kirkpatrick, engineer, Jackson, Miss.

Sewer and Water-works.-Sealed pro posals for building sewers and laying water mains in village of Summerville, Augusta, Ga., received by village council at office of town clerk until 12 M. September 39, and town clerk until 12 M. September 30, and then publicly opened, for about 1700 linear feet 24-inch, 100 linear feet 18-inch, 860 linear feet 15-inch, 100 linear feet 10-inch, 7000 linear feet 8-inch and 550 linear feet 6-inch T. C. plpe sewers; 2860 linear feet 6-inch and 8000 linear feet 4-inch cast-iron water mains; 23 manholes; 9 lampholes; 12 fire hydrants (two-way). Each bid must be accompanied by check for \$100; plans and specifications at village half and at office of Geo. W. Summers, engineer, 412 Dyer Bidg., Augusta; mers, engineer, 412 Dyer Bidg., Augusta; right reserved; A. Cuthbert, intendant.

Sonps.—H. Hassewer, New England Bidg., Rue Nationale, Antwerp, Belgium, wants to correspond with manufacturers of toilet soap; view to representation.

Sprinkler System.—Gilreath Manufac-turing Co., Greenville, S. C., wants prices on sprinkler system.

Steam Shovels,—Choctaw Portland Cement Co., Hartshorne, Okla., wants description and prices (first letter) on new and econd-hand steam shovels.

Steam Shovel.—Richlands Brick Corpo-ration, Richlands, Va., wants light traction steam shovel to be operated by one man.

Steel Specialties .- S. Pittman, Goldsboro, N. C., wants to correspond with manu-facturers of steel specialties in roll and stamp work, with view to placing order for manufacturing special article.

Tanks and Towers.—M. C. Chamblee & Sons, Wakefield, N. C., wants prices on two 900 to 1500-gallon water tanks and towers.

Telephone Equipment.—Office of Chief Signal Officer, Capt. A. S. Cowan, disbursing officer, War Department, Washington, D. C.,

will receive bids until September 10 for fur-nishing miscellaneous telephone equipment, including connectors, perforators, etc.

Textile Machinery .- Boghossian & Co., Rex 125, Paterson, N. J., wants prices on new or second-hand complete equipment for small yarn mill (for shipment abroad) to produce finished and packed yarn from raw cotton; Nos. 8 and 10 yarn, 150 to 200 pounds daily; no engine needed, but data wanted on required hove proving to constitute the latest and the control of the control o quired horse-power to operate by kere engine; state weights and measurement prices f. o. b. New York city preferred.

Tools.—Jules de Brauwere, 3 Rue V!em-inckx, Antwerp, Belgium, wants to correspond with manufacturers of small hand tools for mechanics; view to representation.

Valves, etc.—Jules de Brauwere, 2 Rue Zeminckx, Antwerp, Belgium, wants to cor-espond with manufacturers of cocks, valves and cut-offs for steam, water and gas; view to exclusive representation.

Vacuum Cleaner.-James H. Jamison Williamson, W. Va., wants prices on vacuum

Water Intake and Inlet Tower.-City Council, Muskogee, Okla., will receive bids until 10 A. M. September 19 for construction of water intake and inlet tower; intake to be 54 inches in diameter, 2600 feet long, laid across Arkansas River and up bed of Grand tiver; tower to be of concrete, bullt at upper end of intake; bids invited for construction at comparatively shallow depth in open trench; alternate bids invited for constructrench; alternate bids invited for construction in rock tunnel at greater depth; tunnel
to be lined either with brick or concrete;
certified check \$5000; plans and specifications
can be seen and secured at office of T. P.
Clonts, City Engineer, or from Alexander
Potter, consulting engineer, 114 Liberty St.,
New York, upon payment of \$3; bids to be
filed with Charles Wheeler, Jr., City Clerk;
E. H. Fleming, Commissioner of Water,
Sewer and Lights.

Water Mains. See "Sewer Construction and Water-works."

Water System.—M. C. Chamblee & Sons, Vakefield, N. C., wants prices on water sup-ly systems for private homes.

Water Weigher .- See "Paving Blocks,

Water-works. See "Sewers and Water-

Water-works.—Scales bids addressed to Walter Hodges, Mayor, for furnishing water-works material and equipment will be re-ceived by City Council, Nocona, Tex., until 8 P. M. October 2, Including 560-gailon-per-8 P. M. October 2, including 500-gallon-per-minute rotary pump; 100-gallon-per-minute deep-well pump; 20-horse-power gasoline en-gine; 75,000-gallon steel tank and tower 100 feet over all; 120 tons 4, 6 and 8-inch cast-lron plpe; valves and hydrants; rights re-served; specifications mailed on request by Fountain-Shaw Engineering Co., 208 An-drews Bildg., Dallas, Tex., or by Walter Hodges, Mayor.

Well Drilling.-City of Jessup, Ga., will receive bids for drilling artesian well; Ar-thur Pew, Eastman, Ga., engineer in charge.

Woodworking Machinery. - See Heading Plant.

Woodworking Tools." See "Tools."

Woodworking Machinery,—Carpenter, Taylor & Co., Rutherfordton, N. C., want second-hand four-side planer and matcher.

INDUSTRIAL NEWS OF INTEREST

An Improved Sanitary Drying Machine.

R. T. G. Liesinger, 564 West avenue, Buffalo, formerly member of the firm of Wannenwetsch & Co., Buffalo, announces that he will have his organization completed soon and will be ready to furnish an improved sanitary endering and drying machine and other im proved machinery for packing-houses, abat-toirs, rendering works, fertilizer and gar-bage plants. Estimates for the complete building and equipping of such plants will be furnished on request.

The Security Company's Technical Department.

The Security Cement & Lime Co., Equita-ble Building, Baltimore, has organized a technical department, which will take over Additor, Galveston, Tex., will receive bids until 11 A. M. October 1 for surfacing and shelling of county's roadway over earth part of causeway; 12,000 cubic yards of mudshell, addition to grading; specifications in office to County Auditor, from whom copies can be had on application; certified check \$1000.

The contraction of 20,000 square yards bitumibang and penetration method); 15,000 square yards concrete sidewalks; 5000 linear with the sales department. It will also take up of causeway; 12,000 cubic yards of mudshell, in addition to grading; specifications in office of County Auditor, from whom copies can be had on application; certified check \$1000.

Roofing.—Southern Baptist Assembly, B. W. Spilman, general secretary, Blue Mont, information as to how to meet the troublethe duties that heretofore have fallen on the

me situations that frequently confront the mason, contractor, dealer and architect.

Hertford Hardware & Supply Co.

Catalogues and prices of the various equip-nent to be handled are desired by the Hertford Hardware & Supply Co., Hertford, N. C. This company will begin business October 15 with a wholesale and retail hardware equipment in the Winslow Building at Hertford. A machine shop will also be operated, and the company will be prepared to furnish, install and overhaul machinery of all kinds. It will deal in hardware, mill supplies, ma-chinery, building material and agricultural implem

Dissolution of Partnership.

Dissolution of Partnership.

The firm of Wannenwetsch & Company, composed of C. H. A. Wannenwetsch, A. C. Lembke and R. T. G. Liesinger, doing a general architectural and engineering business and manufacturer of the Wannenwetsch system of sanitary rendering machinery and drying apparatus, Citizens' Bank Building, Buffalo, has been dissolved by mutual consent. C. H. A. Wannenwetsch has formed a partnership with his brother, Andrew T. Wannenwetsch, under the firm name of C.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned

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H. A. Warmenwetsch & Company to carry on the envire business of the original firm.

Crocker-Wheeler Company Announcement.

Announcement is made by the Crocker-Wheeler Company, Ampere, N. J., of the resignation of Mr. Gano Dunn, who has for a number of years been first vice-president and chief engineer in the Crocker-Wheeler Company. He has filled these positions with conspicuous ability, and leaves with the best wishes of the company and of his many friends and associates for his future success.

Light and Water Plant for Sale.

All the property, franchises, etc., of the Marlinton Light & Water Co., Marlinton, Pocahontas county, West Virginia, will be sold at public auction October 3 at the Pocahontas County Courthouse. Marlinton is located on the C. & O. Railway, 2300 feet above sea level, and has 2000 inhabitants. It pays \$2200 per year for light and water. This plant cost the stockholders over \$50,000 and has been running for about five years.

Cotton Mills Near Atlanta for Sale.

The property of the Elizabeth Cotton Mills, located near Atlanta, Ga., is to be sold on Octoler 3 by court or ler. These mills were thoroughly overhauled during the spring of 1919 and 251 Dobby lears with full equipment added. There is room for an addition of 450 spindles with ample power for machinery to operate them. The location of the mill is favorable for economical working, being near the city, where banking facilities are at hand, with fuel at a cost of \$2.25 to \$2.50 per ton of coal delivered, and where the supplies of cotton may be bought directly from the producer. The mill is ready for immediate operation. A large number of the operators are occupying the cottages. There is a complete ginnery on the property capable of ginning 1000 bales of cotton annually. The plant is completely equipped for making fancy Pobby weaves, producing about 40,000 pounds of cloth and 10,000 pounds of hostery yearn monthly. The property was recently appraised at \$178,000, exclusive of the land.

TRADE LITERATURE.

Illustrated Catalogue for Patentees.

An illustrated catalogue has been issued for distribution by Victor J. Evans & Co., patent attorneys, Victor Bidg., Washington. This catalogue gives valuable information and offers suggestious to persons seeking patents. It also illustrates the character and amount of business carried on by this company. The company is the owner of the Victor Bidg., a 6½-story office building, which is now being enlarged by an extension of 55 feet. Their suite of offices occupy two entire floors of this building. A copy of the catalogue will be sent to interested persons on application.

Trussed Concrete Steel Co.'s Specifi-

eations.

A book of specifications for waterproofing, damp-proofing and fluishing concrete stucco and masonry has been issued by the Trussed Concrete Steel Co., Detroit. It describes fully the materials, methods and applications in this work. Separate sets of specifications are given for cement stucco, water-proofing mass concrete by the Integral method, for waterproofing concrete and general massonry structures by means of waterproof plaster coat, for waterproofing building substructures by the membrane method, for waterproofing culverts, bridges, etc., for the use of "Trus-Con" plaster bond, for finishing concrete floor with "Trus-Con" floor enamel, for damp-proofing masonry surfaces, for finishing new interior walls, and for painting structural steel. Illustrations of the work are included with each set of specifications.

"Tapestry" Brick Fireplaces.

In the construction of attractive fireplaces simplicity of design, the elimination of moldluzs and the artistic use of ornamental brick and tile are the controlling requirements. The invention and futroduction of "tapestry" brick, which is in itself full of character and attractiveness, is the latest achievement in ractiveness, is the latest achievement in e art of brick making, the evolution of tich has been guided by the wonderful ick and tile work of the ancient Persians, apestry" brick is a radical departure from the conventional standards of ordinary brick d is particularly appropriate for use in e building of the ornamental fireplace in e notern home. "Tapestry" brick was verted and developed by Fiske & Co., Inc., Arch St., Beston, and is manufactured by that company. The catalogue Issued by the company contains many illustrations of fire-places constructed of "tapestry" brick, in-cluding two colored illustrations of the tapestry effect produced by the use of this brick. The company also manufactures grooth-face bricks in all colors. Resides the strooth-face bricks in all colors. Hesides the Boston office, exhibition and sales rooms are located in the Arena Bidg., 40 E. 32d St., New York, and agencies are established throughout the country. This catalogue will be sont on request, and extra copies may be ined by architects. The company has exhibition-rooms in the Arena Bidg., treated in a distinct color of "Tapes-brick. Five "Tapestry" brick fireplaces ire exhibited in one of these rooms. possible to describe or illustrate the color ects of this remarkable material. The licate gradations of light and shade can be properly appreciated by seeing them as they are used in the glowing hearth. Samples of the "Tapestry" brick for various effects will be sent upon request, and such further information and details as may be lesired will be furnished. The word "Tapestry" is a trade-mark, registered in the U. S. Patent Office, and is branded on each thereby assuring the public of the teness of the "Tapestry" brick when used. The information in this cata-is of especial interest to architects and builders in the South and Southwest, where fireplaces are so much in vogue, both other methods of heating are installed, for their artistic beauty, homelike effect, and other attractive features

MOTOR TRUCK AND TRACTOR NEWS.

Mack Motor Truck in Baltimore.

The Mack Brothers Motor Car Co. has sold a two-ton Mack truck to Dunning's Express Co., Baltimore. The truck will be used for city and suburban deliveries.

Tampa Branch of Cole Motor Car Co.

The Cole Motor Car Co. of Indianapolis will erect a building at Tampa. Fla., equipped with machinery for the construction of bodies of its motor cars for sale in the South. The building will be four stories, 190x190 feet, concrete, and will cost about

Lozier to Bring Out Powerful Truck.

A. J. Fleischmann, manager of the Lozier Sales Co., Baltimore, states that a strongly designed motor truck will be put on the market soon by the Lozier company, which will have many points of value. The machinery has been designed purely for motor trucks, and is not taken from the automobile design, but is heavier and better adapted to strictly motor truck purposes.

Massachusetts Owns a Motor Truck.

Massachusetts is said to have the distinction of being the first State in the United States to own a motor truck. It is used to transport explosives from the State arsenal at South Framingham to the 10 branch storehouses in other parts of the State where the various light batteries are located.

The truck is a "White" 1½-ton vehicle and saves the State a substantial sum in freights. It also does the hauling between the railroad station and the arsenal, a distance of 1¾ miles, over which it hauls annually more than 1000 tons of clothing, arms and equipments.

Business Men Convinced of Advantage of Motor Trucks.

Charles A. Malley, manager of the Malley Motor Vehicle Co., Boston, distributing agent for the Warren motor truck in New England, recently said that the time has now arrived when business men have been convinced of the many points of advantage of the use of the commercial motor vehicle over the horse-drawn vehicle, and the time is now ripe for those competitors who have been watching the users of motor trucks to also incorporate motor trucks in their business. In conclusion he said: "Competition in the motor truck business is going to be keen, but there is at present room for all who are ready to give fair value for a business man's money."

Opportunity for Motor Truck Service

Mr. J. M. Ross of Somerset, Ky., writes the Manufacturers Record as follows: "If manufacturers of motor trucks would send their representatives here they might be able to organize a motor freight line to haul be-

tween this city and the Cumberland River, seven miles distant. The Government will complete lock No. 21 this month, which gives navigable water to Waitsboro on the Cumberland River all the year. A good road extends from Somerset to Waitsboro. Somerset is a town of 6000 inhabitants."

Packard's New Type Camp Car.

Henry B. Joy, president of the Packard Motor Car Co., who has had a varied experience in camp life, has designed a camping car, mounted on a standard Packard 30-horse-power chassis. The body is built in the Packard shops, and it is especially adapted for "roughing it" in sparsely settled sections. Touring car seats are used in front. The length of the body back of the driver's seat is six feet and the side seats are convertible into bunks. This car has been received with considerable enthusiasm by persons who have been in need of fust such a vehicle.

Mitchell-Lewis Motor Cars in South

Senor Candido Daglio, head of Luis Daglio & Company of Montevideo, Uruguay, a firm which is said to have the largest garage in South America, was a recent visitor at the plant of the Mitchell-Lewis Motor Co., Racine, Wis. He has just finished an extensive trip through Europe, where he made a thorough inspection of automobile manufacturing methods. His firm has for some time handled the Mitchell car, as well as many European makes, but he has stated that hereafter he will devote his attention almost exclusively to the Mitchell product. With the advent of automobiles this old firm of carriage builders built a repair shop and garage, which is said to be the most complete in South America.

Motor Trucks for Hauling Ores.

The increased production of motor trucks will find a demand for such trucks and wagons suitable for hauling ore in many of the mining plants of this country. se already gives promise of hauling ore much smaller cost than such work can be ne by teams. With this object in view, a German manufacturing company has recently built a road train in which the light of the gas motor truck is combined with the advantages of a traction engine for pulling a number of wagons. The train consists of a motor truck and six trailers. consists of a motor truck and six trailers, each of which is capable of transporting five tons at a speed of seven to ten miles per hour. An electric driving motor is attached o each axle of all the wagons and current upplied from two electric generators driven y two gasoline motors on the leading motor Steering is done from the driver's wagon, and a provision of suitable shafting ragon, and a prevision of saturds statutes etween the trailers causes them to follow the bends or curves in the road taken by the leading wagon. It is said that these trains can travel readily over rough gre and that the wh ad tires, do not sink into sar

Kent-Jordan Plans in Carolina.

Referring to the activities of the Kent-Jordan Company on the recently-acquired tract of 49,000 acres in Cumberland and Harnett counties, North Carolina, J. F. Jordan of Greensboro, N. C., writes to the MANUFACTURERS RECORD:

"The town and farm developments are to be entirely separate, but are to be carried along at the same time. The town is to be a resort town, and not a commercial town at all, and the Country Clubhouse and golf links alone will require considerably more than 200 acres. To be exact, 1500 acres have been reserved for town purposes, which embraces hotels, residences, clubhouses, golf links, athletic fields and lakes.

"The agricultural part of it is already making rapid progress, and as soon as road-building outfits can be procured a sand-clay road will be hitched on to the Pinehurst road and completed to Fayetteville, and a little later on extended northerly until it connects with the national highway at Greensboro. Mr. Leonard Tufts, owner of Pinehurst, and one of the most liberal and broad-minded men in the United States, is working hand in hand with us to get these roads completed at the earliest possible moment. He is also anxious to see Pinewild, our new town, grow into prominence, as it will be a place

where his ever-increasing number of guests can go for a drive or game of golf and exchange visits with Pinewild guests.

"To sum it all up, the development of Pinewild and the 40,000 acres adjoining it is to be advanced on broad and substantial lines, and the town in particular, and everything in it are to have an individuality all its own."

Birmingham's Farm Movement.

In his report of the first year's opera tions of the farm movement department of the Chamber of Commerce of Birmingham. Secretary S. Hechinger of the department says that 27 families were located 16 of which spent more than \$40,000 in buying lands, implements, stock, etc., and that quite a number of other persons have lo cated near Birmingham, indirectly as a esult of the work of the department, Such work, of course, is of gradual growth, but as to its ultimate outcome Mr Hechinger says: "The final results of getting hundreds and perhaps thousards of settlers within the Birmingham district will mean that instead of \$5,000,000 sent away annually for feedstuffs, \$5,000,000 worth will be shipped away to less fortu nate sections, a difference of \$10,000,000 to be distributed among our stores and shops. It will mean a permanent class of efficient white labor and servants. It will mean new industries and new capital pouring into the district, for lest we forget, I will repeat again and again that the history of the West and North shows the undeniable fact that everything, industry, capital and labor, follows the settler, and that without the settler no real permanent prosperity can be built up and

"And the coming of thousands of families to settle on the lands within a radius of 40 miles of Birmingham; the building up of a great agricultural as well as a great industrial district, both to go hand in hand, is no dream by any means. It can be done and will be done with the proper co-operation of our people."

Texas Coal and Lignites.

The Bureau of Economic Geology and Technology of the University of Texas devotes the latest issue of its quarterly buletin to studies of the composition of Texas coal and lignites and the use of producer gas in Texas, by Director William B. Phillips, S. H. Worrell and Drury McN. Phillips. Between 1901 and 1910 the pro duction of coal and lignite in Texas increased from 1.104.953 tons, valued at \$1,907,024, to 2,108,179 tons, valued at \$3,771,089. The production of lignite alone in this period increased from 303,155 tons to 979,232 tons. The importance of lignite in gas producers for use in gas engines or for fuel in the burning of lime. etc., is becoming better and better recognized. In Texas the lignite fields embrace at least 60,000 square miles, and contain every variety of this fuel. Hence the investigations of the bureau are of vital importance. The studies included in the bucau contain detailed analyses of coal and lignite deposits, with descriptions of the 56 producers for making gas in the State.

Deeper Waterways.

The Fourth annual convention of the Mississippi to Atlantic Inland Waterway Association will be held in Montgomery, Ala., November 20-22. Senator Duncan U. Fletcher of Florida is president of this organization. Among matters to be considered will be that of a joint convention with the Atlantic Deeper Waterways Association at Jacksonville, Fla., during 1912, to be of two weeks' duration, and consisting in part of an enormous water carnival, participated in by vessels of all classes and descriptions from every section of the

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the Jacksonville meeting the greatest waterway carnival convention ever held in the United States.

Texarkana's Fire Apparatus.

Under the auspices of the Board of Trade of Texarkana, Ark.-Tex., invitations were circulated last week for a public official demonstration for the benefit of fire chiefs, city officials and others of the two new auto-chemical engines and hose cars which have been added to the fire-fighting equipment of the city, giving it four automobile fire-fighting apparatus and four horse-drawn apparatus. Mr. V. E. Buron, secretary of the Board of Trade, informs the MANUFACTURERS RECORD that ou account of this equipment the Texas Rating Board has agreed to reduce for Texarkanans the key rating from 63 to 30. The demonstration, which is to be had on September 14, will consist of competitive tests of the auto-cars equipped with airpressure chemical engines, the soda and acid chemical engine and a steam fire en-

Shipping Alabama Iron to England.

A considerable shipment of pig-iron has cently been made from Birmingham to England, the steamship Whatley Hal!, of whaleback construction, having loaded at Savannah with a cargo of iron direct from Birmingham for Swansea. Some years ago, at the time when the price of iron was greatly depressed, Birmingham succeeded in finding a foreign market for about 250,000 tons, thus relieving the local situation by disposing of surplus stock in foreign markets, even though at little and probably in many cases no profit. If a foreign market can now be found for some of the surplus stock of pig-iron in this country it will greatly relieve the situation in the South and elsewhere.

Another Portland Cement Plant.

Referring to reports that he is organizing a company to build a Portland cement plant, H. R. Blauvelt of Knoxville wires the MANUFACTURERS RECORD as follows: "Capacity, 1500 barrels daily; cost \$500,000; cement and steel construction; onstruction contract not yet let; Tennessee capitalists interested; organization not quite perfected."

Vivian, La.

Mr. J. G. Johns of Vivian, La., writes to the Manufacturers Record that his munity has unlimited supply of natural gas and is looking for manufacturing plants to use it at from two and one-half to three cents per 1000 feet. Vivian expeets to have connection with four trunk lines of railroad by January.

An officer of the Deering Southwestern Railway is reported saying that construction is being pushed by the company's forces on an extension from Converse to Hornersville Junction, Mo., about six miles, and that the Paragould Southeast-ern tracks will be used from there one and one-half miles to Hornersville. The company has put in service this year one extension from Deering to Caruthersville, about 13% miles, and another from Hickory Landing road to Converse, about two

According to the Business Men's League of St. Louis, new factories started in that city in the past 20 months are employing 7000 workers at an aggregate salary wage of \$4,550,000 a year.

During the season ended August 31 Memphis received 357.885 bales of cotton from Mississippi, 334,791 from Arkansas. | Mamphis received 357.885 bales of cotton | Missellaneous Stocks. | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100

United States. It is proposed to make 11,570 from Louisiana and other States, a total of 920,887 bales, which were an increase of 135,402 bales over the preceding

> The Gulf & Ship Island Railroad Co. has arranged to bring 90 families from Pittsburg, Pa., to settle upon Southern Mississippi land, according to a dispatch from Laurel.

> Capt. Robert Ries of Nashville has donated to the industrial bureau of that city a five-acre factory site in West Nashville.

> It is estimated that the 70,000 acres in rice in Arkansas will yield 2,800,000 bushels this year.

> During the 12 months ended July 31, 1911, the sales of leaf tobacco in North Carolina aggregated 121 082 841 nounds.

FINANCIAL NEWS

The Manufacturers Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern

Review of the Baltimore Market.

Office MANUFACTURERS RECORD.

Review of the Baltimore Market.

Office Manufacturers Record.

Baltimore, Md., September 13.

The Baltimore stock market was quiet during the past week. In the trading United Railways common sold from 17% to 17½; do. incomes, 63 to 62½; do. funding 5s, 85% to 85; do. do. scrip, 90; do. notes, 99½; to 99%; do. 4s, 85; Consolidated Gas, Electric Light & Power preferred, 99½; to 99%; consolidated Gas, Electric Light & Power preferred, 99½; to 99%; do. 4s, 85; Consolidated Gas, Electric Light & Power preferred, 99½; to sonsolidated Gas 4½s, 96 to 96½; Seaboard Company second preferred, 55¼ to 53; Seaboard 4s, stamped, 87 to 86%; do. adjustment 5s, 75½; to 75½; Mt. Vernon-Woodberry Cotton Duck 5s, 77½; G.B.-S. 4s, 42%.

Maryland Casualty sold from 94 to 95; Fidelity & Deposit, 151; United States Fidelity, 164½; Mercantile Trust, 147; Maryland Crust preferred, 117.

Other securities were traded in thus: Atlantic Coast Line of Connecticut 5-20s, 92; Lake Roland Elevated 5s, 108; Virginia Midland 5th, 106; do. 3d, 106 to 105½; Anacostia & Potomac 5s, 101½; Atlantic Coast Line convertible debenture 4s, 98 to 98½; Houston Oil common, 9 to 91½; do. preferred, 72½ to 74; Maryland Electric 5s, 98½; Norfolk Railway & Light 5s, 99½; Baltimore City 4s, 1957, 101; do. 3½s, 1980, 87½; do. do. 1940, 93%; Coal & Iron Railway 5s, 101½ to 101%; Macon Railway & Light 5s, 98; Seaboard & Roanoke 5s, 106; Baltimore Brick 5s, 83½; Fairmont & Clarksburg Traction 5s, 99%; do. notes, 99½; Censolidation Coal, 109; Baltimore Traction (North Baltimore division) 5s, 109; Florida Southern 4s, 91; Coal & Coke Railway 5s, 95; St, Paul Cable 5s, 1937, guranteed, 107.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended September 13, 1911.

Dellara A Stanton Des	DIA A	Lordo
Railroad Stocks. Par.	DIG. A	
Atlantic Coast of Conn100	73	240
Georgia Sou. & Fla. 21 Pfd100	1	85
Sealoard (o. Common100	221/4 79	231
Seaboard Co. 1st Pfd100	63	85
Seal oar ! Co. 24 Pfd100	51	55
United Rys. & Elec. Co 59	1772	17%
Virginia Rwy. & Power Com100	37	***
Virginia Rwy, & Power Pfd100	771/4	***
Bank Stocks.		
Farmers & Merchants' 40	52	***
First National		150
Merchants'		185
Howard 10	13%	***
Marine 30	43	
Mechanics' 10	118	
Old Town	1234	
Union		141
Western	38	41.
Trust, Fidelity and Casu-	-	
alty Stocks.		
Fidelity & Deposit		151
Fidelity Trust	993	
Maryland Trust Pfd100	11636	11714
Maryland Consoler	95	
Maryland Casualty		140
Mercantile Trust & Deposit 50	146	148
Union Trust 50	200	68
U. S. Fidelity & Guaranty100	160	170

	naurona nonas.		
	Atlantic Coast Conv. Deben. 4s	97%	9736
	At. Coast (Conn.) 4s, Ctfs., 5-20s.	91%	9216
		8472	0078
	Atlantic Coast 4s, Ctfs		83
	Carolina Central 4s		9214
	Charleston & West, Car. 5s	10514	106
	Coal & Coke Rallway 5s	94	9416
	Coal & Iron Rallway 58	101%	10212
	Col & Classes And Co		
	Col. & Green. 1st 6s	1051/2	106
	Florida Southern 4s	901/2	9136
	Georgia & Alabama 5s	105	105%
	Georgia, Car. & North, 1st 5s	10414	105
	Georgia Pacific 1st 6s	- 1 10	11436
	Convers Courthons & Ele Ast Se	100	
	Georgia Southern & Fla. 1st 5s	107	444
	Macon, Dublin & Savannah 5s	422	98
	Petersburg Class A 5s	105%	
	Seaboard 4s, Stamped		87
1	Seaboard Adjustment 5s	7516	
	Seaboard Refunding 4s	8046	61
	Seeleand 6 December 7		81
	Scaboard & Roaroke 5s	1051/2	***
	Virginia Midland 3d 6s	10516	
1	Virginia Midland 5th 5s	10514	10634
1	Virginia Midland G. M. 5s	106	111
	Wilmington & Weldon 4s		98
		444	9.0
	Street Railway Bonds.		
١	Balto., Sp. Pt. & C. 41/48	97%	9714
1	Baltimore Traction (N. B.) 58	108	109%
1	Charleston City Railway 5s	103	
	Charleston Con District		2.5.5
	Charleston Con. Electric 58	96	97
	City & Suburban 5s (Balto.)	1041/2	***
	City & Suburban 5s (Wash.)	104	105
	Fairmont & Clarksburg Trac. 5s	9914	93%
1	Lake Roland Elevated 5s	108	1083
1	Maryland Electric Railways 5s		98
1		0027	
1	Memphis Street Railway 58	9814	100
1	Norfolk & Portsmouth Trac. 58	88	8814
1	Norfolk Rallway & Light 5s	991/2	9934
J	Norfolk Street Railway 58		10814
1	United Railways 1st 4s	85	7.00
1	United Railways Income 4s	6214	63
1	Later Ballways Income 48		
	United Railways Funding 5s	85	86
1	United Railways Notes 5s	9938	991/2
1	Miscellaneous Bonds.		
1	Ala. Con. Coal & Iron 5s	80	86
1	Baltimore Electric 7s. Stp	93	9416
1	Dattimore Electric es. Stp		
1	Consolidated Gas 5s	10814	109
J	Consolidated Gas 416s	961/8	96%
1	Consolidated Gas 4%s, Cfs	98	99
1	Consolidation Coal 1st 41/28	102	
1	Con. Gas. Elec. Lt. & P. 41/28	86%	87
1			
1	Fairmont Coal 1st 5s	9674	971/4
1	G. B. S. Brewing 1st 4s	42	43
1	Jamison Coal & Coke 5s		9216
ı	Mt. Vernon-Woodb'y Cot. Duck 5s.	77	77%
1	2		1118

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending September 11.

Bid. Asked.

Abbeville Cotton Mills (S. C.). Alken Mfg. Co. (S. C.)	Bid.	Asked
Abbeville Cotton Mills (S. C.)	80	75
American Spinning Co. (S. C.)	160	***
Anderson Cotton Mills (S. C.)	111	48
Anderson Cot. Mills (S. C.) Pfd.,	92	100
Arkwright totton Mills (S. C.)	99	100
Augusta Factory (Ga.)	40	
Avondale Mills (Ala.)	116 120	130
Brandon Milis (S. C.)	58	103
Brogon Mills (S. C.)	222	90
Calarras Cotton Mills (N. C.)	135	135
Chadwick Mfg. Co. (N. C.) Pfd	100	
Chiquola Mfg. Co. (S. C.)	***	170
Clinton Cotton Mills (S. C.)	97	120
Columbus Mfg. Co. (Ga.)	93	98
Courtnay Mfg. Co. (8. C.)	99	100
Darlington Mfg. Co. (S. C.)	39	80
D. E. Converse Co. (S. C.)	***	90
Brayton Mills (S. C.)	95 117	100
Easley Cotton Mills (S. C.)	162	175
Enoree Mfg. Co. (S. C.)	50	65
Enterprise Mfg. Co. (S. C.) Pfd	96 65	100
Exposition Cotton Mills (Ga.)	0.3	200
Anderson Cot. Mills (S. C.) Pfd. Arcadia Mills (S. C.) Arkwright Cotton Mills (S. C.) Arkwright Cotton Mills (S. C.) Argusta Factory (Ga.) Avondale Mills (Ala.) Belton Mills (S. C.) Brandon Mills (S. C.) Brandon Mills (S. C.) Brandon Mills (S. C.) Cannon Mfg. Co. (N. C.) Calarrus Cotton Mills (N. C.) Chiquola Mfg. Co. (S. C.) Clifton Mfg. Co. (S. C.) Courtnay Mfg. Co. (S. C.) Drayton Mills (S. C.) Drayton Mills (S. C.) Eagle & Phenix Mills (Ga.) Easley Cotton Mills (S. C.) Enoree Mfg. Co. (S. C.) Enoree Mfg. Co. (S. C.) Enterprise Mfg. Co. (S. C.) Exposition Cotton Mills (Ga.) Exposition Cotton Mills (Ga.) Gaffney Mfg. Co. (S. C.) Gainesville Cotton Mills (Ga.) Galmesville Cotton Mills (S. C.) Gaines Mfg. Co. (M. C.) Glenwood Cotton Mills (S. C.) Granly Cot. Mills (S. C.)	55	60
Glenwood Cotton Mills (S. C.)	72	150
Gluck Mills (S. C.)	99	***
Granby Cot. Mills (S. C.) 1st Pfd.	35	45
Greenwood Cotton Mills (S. C.)	140	145
Grendel Mills (8, C.)	90	100
Harisville Cotton Mill (S. C.)	160	175 175
Inman Mills (S. C.)	100	105
Glenwood Cotton Mills (S. C.) Gluck Mills (S. C.) Granby Cot. Mills (S. C.) 1st Pfd. Granleville Mfg. Co. (S. C.). Greenwood Cotton Mills (S. C.) Lancaster Cotton Mills (S. C.) Lancaster Cotton Mills (S. C.) Lockhart Mills (S. C.) Lockhart Mills (S. C.) Lockhart Mills (S. C.) Lockhart Mills (S. C.) Mollohon Mfg. Co. (S. C.) Mollohon Mfg. Co. (S. C.) Mollohon Mfg. Co. (S. C.) Monarch Cotton Mills (S. C.) Nowberry Cotton Mills (S. C.) Nowberry Cotton Mills (S. C.) Norris Cotton Mills (S. C.) Norris Cotton Mills (S. C.)	80	85
Lancaster Cot. Mills (S. C.) Pfd.	130	100
Langly Mfg. Co. (S. C.)	104	112
Limestone Wills (S. C.)	127 155	135 160
Lockhart Mills (S. C.)	100	65
Lockhart Mills (S. C.) Pfd	90	100
Marlboro Cotton Mills (S. C.)	444	95 80
MHIs Mfg. Co. (S. C.)	0.00	102
Mollohon Mfg. Co. (S. C.)	95	105
Monarch Cotton Mills (S. C.)	100	
Newterry Cotton Mills (S. C.) Ninety-Six Cotton Mills (S. C.)	125	130
Ninety-Six Cotton Mills (8, C.)	130 121	150 130
Olympia Cotton Mills (S. C.)	90	
Orr Cotton Mills (S. C.)	90	93
Ninety-Six Cotton Mills (S. C.) Norris Cotton Mills (S. C.) Olympia Cotton Mills (S. C.) Orr Cotton Mills (S. C.) Pacolet Mfg. Co. (S. C.) Pacolet Mfg. Co. (S. C.) Pfd Parkar, Common.	95	300
Parker Common		40
Parker Common. Parker Pfd Pelzer Mfg. Co. (S. C.) Piedmont Mfg. Co. (S. C.) Piedmont Mfg. Co. (S. C.) Saxon Mil.s (S. C.) Saxon Mil.s (S. C.) Sibley Mfg. Co. (Ga.) Spartan Mills (S. C.)	5.5.5.	75
Pledwont Mfg. Co. (S. C.)	175	163 177
Poe Mfg. Co., F. W. (S. C.)	110	115
Sibley Mfg. Co. (Ga.)	65	130
Spartan Mills (S. C.)	120	130
Trion Mfg. Co. (Ga.)	310	130 350
I'nion-Buffalo (S. C.) 1st Pfd	411	75
Sibley Mfg. Co. (Ga.). Spartan Mills (S. C.). Trion Mfg. Co. (Ga.). Tucapau Mills (S. C.). Trion Buffalo (S. C.) 1st Pfd. Inion Buffalo (S. C.) 2d Pfd. Victor Mfg. Co. (S. C.). Warren Mfg. Co. (S. C.). Warren Mfg. Co. (S. C.). Washington Mills (Va.). Washington Mills (Va.). Washington Mills (Va.).		16
Warren Mfg. Co. (S. C.)	110	115 95
Warren Mfg. Co. (8, C.) Pfd	100	105
Washington Mills (Va.)	28 106	110
Whitney Mfg. Co. (8, C.)	100	110
Wiscassett Mills (N. C.)		135
Washington Mills (A.C.) Fig. Whitney Mfg. Co. (8, C.). Wiscassett Mills (N. C.). Woodruff Cotton Mills (8, C.). Woodside Cotton Mills (8, C.). Williamston Mills (8, C.)	110	115 100
Watts Mills (S. C.)	80	90
Williamston Mills (S. C.)	130	125

Bank Reports.

The First National Bank of Baltimore, Md., reports September 1, 1911, loans and discounts, \$4,572,762; lawful money reserve in bank, \$447,100; capital stock paid in, \$1,000,000; surplus fund, \$500,-000; undivided profits, less expenses and taxes paid, \$500,000; undivided profits, less expenses and taxes paid, \$70.822; total deposits, \$6.407.018; total resources. \$8,608,574. H. B. Wilcox is president; Blanchard Randall, vice-president; Wm. S. Hammond, cashier; Samuel W. Tschedi and R. E. Bolling, assistant cashiers, and Raymond B, Cox, auditor.

The National Exchange Bank of Baltimore, Md., reports September 1, 1911, loans and discounts, \$4,079,044; due from banks, \$791,292; cash and due from reserve agents, \$991,020; capital stock, \$1,000,000; surplus and undivided profits, \$735,543; circulation outstanding, \$936,-297; deposits, \$4,529,359; United States deposits, \$125,000; total resources, \$7,-486,200; Waldo Newcomer, president; Summerfield Baldwin, vice-president; R. Vinton Lansdale, cashier, and Clinton G. Morgan, assistant cashier.

The First National Bank of Birmingham, Ala., reports September 1, 1911, loans and discounts, \$7,355,767; to al cash, \$3,201,588; capital stock, \$1,500, 000; surplus and profits, \$1.512,928; circulation, \$1,207,497; total deposits, \$8,-745.748; total resources, \$12,966,173, W. P. G. Harding is president; J. H. Woodward and J. H. Barr, vice-presidents; Thomas Hopkins, cashier; F. S. Foster, Thomas Bowron and J. K. Fleming, assistant cashiers; J. E. Ozburn, secretary savings department, and J. II. Wetmore, auditor.

A Cotton-Growing Investment.

Atwood Violett & Co., 20 Broad St., New York, are offering through our adver-tising columns the preferred stock of the Santo Domingo Planters' Co. The firm of Violett & Co. is an old house of 40 years' standing, members of the New York Stock exchange, the New York Cotton Exchange, the New Orleans Cotton Exchange and the Liverpool Cotton Association. This house has been intimately identified with the cotton trade since its establishment more than 40 years ago. When the Santo Domingo Planters' Co, proposition was presented to Mr. Atwood Violett he had a very careful investigation made of the undertaking. This led him to regard the matter with such favor that his house has undertaken the financing of the deal. The property to be purchased in Sauto Domingo possesses an exceptional geo-graphical location in relation to deep water, and with an estimated yield of three bales of Sea Island cotton per acre per annum it would seem that it presents an unusual opportunity for large earnings, Full information can be secured from Atwood Violett & Co.

FINANCIAL CORPORATIONS.

Ala., Berry.—The Bank of Berry is reported being organized with \$15,000 capital by A. M. Grimsley, E. M. Grimsley, J. C. Grimsley, F. P. Goodwin, C. A. Beasley, S. T. Wright, R. P. Cain, E. E. Thomason, C. F. Stewart, W. P. Boone, E. M. Newman, S. L. Dobbs, S. L. South, Fred Johnsen and Chas. E. McCracken.

South, Fred Johnson and Chas. E. Suc-Cracken.

Ala., Columbiana. — The Shelby County State Bank is reported organized with W. B. Browne president, Dr. H. I. Williams vice-president and Henry Milner cashler; directors. W. B. Browne, J. R. White, L. E. Christian, Dr. J. H. Williams and J. W. Johnston. Business is expected to begin alont October 1 with a paid-up capital of \$15,000.

at out October 5 and 15 at 15

selden, W. S. Harvey, Wm. McIntosh and J. W. Randall, all of Robertsdale, and Oscar Johnson of Silver Hill.

Ark., Danville.—The Citizens' Bank of Danville is reported chartered; capital \$25,000. Incorporators. Samuel Bondi, Henry A. Townes, Oscar L. Clements, Logan M. Ladd, John Kennon, John A. Horn, F. M. Baker and others.

Ark., Kingston.—The Bank of Kingston is reported to have begun business with J. N. Bunch, president, and George W. Bashore, cashier.

Ark., Little Rock.—An official letter denles report that the German National Bank is interested in the organization of a new bank at Little Rock.

Ark., Pangburn. — The Pangburn State Bank, capital \$20,000, is reported organized with directors thus: Harry Churchill, president; J. D. Cattleberry, vice-president; William Ellis, cashier, and Arthur Henderson, all of Pangburn, and C. F. Long of Judsonia.

Ark., Turrell.—The Crittenden County Bank & Trust Co., capital \$100,000, is reported to have begun business with L. P. Berry, president; S. I. Newman and Geo. W. Patterson, vice-presidents; H. E. Wilder, cashier.

Fla., Clearwater.—Official: The Clearwater Abstract Co., incorporated, began business September 4 with A. B. Avery, president; D. B. Givens, vice-president; D. C. Givens, secretary, and H. W. Givens, treasurer.

Fla., Tarpon Springs.—The Greek-American Bank, capital \$15,000, is reported organized with directors thus: Ernest Meres, president; Ashiand P. Beckett, vice-president; R. H. Sammons, cashier; N. A. Van Winkle, R. J. Blimicker.

Ga., Atlanta.—Official: The Travelers
Bank & Trust Co. chartered; proposed capital \$200,000; surplus \$50,000; incorporators,
W. S. Lonnsbury, J. F. Cove, W. P. Fafa, A.
M. Schoen and H. H. White, all of Atlanta,
Business is expected to begin between October 1 and 15.
Ga., Buchanan.—The Farmers and Citizens

Ga., Buchanan.—The Farmers and Cltizens' Bank is reported to have elected directors thus: G. N. Moore, W. J. Spelght, M. W. Weatherby, V. V. Pope and J. R. Bush. Business is said to have begun.

Business is said to have begun.

Ga., Blakely,—The Farmers' State Bank, capital \$50,000, is reported organized with J. S. Mims president, T. B. McDowell vice-president, E. L. Fryer, Sr., vice-president, J. B. Tarver cashler, and E. L. Fryer, Sr., Dr. J. H. Hand, J. O. Bridges, F. T. Cordray, W. G. Purk, R. R. McLendon, Joseph Freeman, J. S. Mims, J. B. Tarver, W. B. Hattaway and T. B. McDowell.

Ga., Gillsville,—Reported chartered; The Bank of Gillsville; capital \$25,000.

Ga., Hinesville.—Reported chartered: The Hinesville Bank; capital \$25,000.

Ga., Leesburg.—Reported that steps are being taken to open a new bank in Leesburg. Ga., Montrose.—Reported chartered: The Montrose Banking Co.; capital \$25,000.

Ga., Morgan.—The Bank of Morgan, capital \$25,000, is organized with Z. T. Rabun president, L. D. Monroe vice-president and J. E. Toole fiscal agent. Cashier not yet elected.

Ga., Stone Mountain.—Reported chartered:
Granite Bank of Stone Mountain; capital
\$25,000, Incorporators: E. J. Spratling, S. H.
Venable, Atlanta; J. S. McCurdy, D. F.
Smith, L. B. Greer, W. D. Maddox, V. R.
Williams, L. F. McClelland, W. A. Woodis,
S. H. Hardeman, W. J. Smith, Stone Mountain.

tain,
Ga., Union Point.—Reported chartered;
The Farmers' Bank of Union Point; capital
\$25,000.

\$25,000.
Ga., Toccoa.—Official: The Bank of Toccoa chartered; capital \$33,000; directors, L. A. Edwards, W. T. Austin of Seneca; E. Schaefer, E. W. Schaefer, H. T. Mozeley, N. S. Garland, J. A. Creasy, W. M. Kilgo, J. C. Andrews, J. D. Crother, W. F. Smith, J. M. Lothridge, Claude Bond, W. C. Edwards and Thos. Sprinkle. Business began September 2.

Ga., Sharpsburg.—Official: The Sharpsburg Banking Co. chartered; capital \$25,000, with 60 per cent. paid in. Officers not yet elected. Business is expected to begin about October 15. J. R. Cole and others interested.

La., Lake Charles.—The Dees-West Company, capital \$25,000, has filed its charter. Directors, T. A. Dees, president; Geo. West, vice-president, and W. H. Lee, secretary and treasurer, and B. H. Smith.

Miss., Meridian.—The Southern Loan & Investment Co., capital \$20,000, is reported incorporated by J. A. McCain, J. M. McBeath, C. M. Pobles and others.

N. C., Greensboro.—The Central Banking & Trust Co. is reported chartered; capital \$250,000; incorporators, Lindsay Hopkins, J. E. Latham and W. G. Balsiey.

N. C., Raeford.—The Bank of Hoke is reported to have begun business; J. W. Johnson, president; J. C. Thomas, vice-president, and Martin Luther McLean, a Maxton boy, crashior.

N. C., Shallotte.—The Bank of Shallotte is reported chartered: capital \$25,000; Thomas E. Cooper, Robert W. Davis, E. H. Cranmer, J. W. Brooks and others.

Okla., Kaw City.—Reported chartered: The First National Bank; capital \$25,000; John E. Hoefer, president; W. S. Cline, vicepresident, and H. E. Guy, cashier. This is a conversion of the First State Bank.

Okla., Shawnee.—Reported chartered: The Washita Valley Investment Co.; capital \$69, 900; directors, D. D. Goodrich, A. W. Cooper and Charles M. Moyers, all of Shawnee, and E. J. Kelly of Waneka.

Okla., Tulsa.—The Tulsa State Bank is reported chartered; capital \$50,000; directors, A. E. Lewis, E. A. Ross and N. W. Mayginnis.

Okla., Tribbey.—The Security State Bank capital \$10,000, is reported incorporated by Charles Greenmore and W. M. Abernathy of Lexington, J. R. Stogner of Tribbey and O. B. Avant and O. L. Becker of Wanette.

S. C., Graniteville.—The Palmetto Life & Accident Insurance Co. of Graniteville is reported to have been granted a commission; capital \$20,000; petitioners, W. A. Giley, John F. West and D. M. Ariali.

8. C., Kershaw.—The Citizens' Bank, capital \$25,000, is reported incorporated by J. F. Gardner, Jr., C. Ross Blackmon, Lewis Conder, J. C. Massey and H. E. Reese.

S. C., Modoc.—Reported chartered: Bank of Modoc; capital \$25,000; W. M. McDaniel, president; B. M. Bussey, vice-president; A. V. Bussey, cashier; B. Sherwood Dunn, second vice-president.

8. C., Nichols,—Official: The Bank of Nichols chartered: authorized capital, \$25,000 with \$10,000 paid in. W. M. G. Buck is president, Mullens; H. W. Metice vice-president and B. B. Elvington cashler, both of Nichols. Business is to begin about October 15.

8. C., Ridgeville.—The Bank of Ridgeville is reported organized with \$25,000 capital; \$15,000 paid in; directors, president, W. B. Browning; vice-president, J. E. Thrower; cashler, W. J. Dukes; solicitor, St. Clair Muckenfuss; J. M. Mizell, George Way and W. T. Varnedoe, Business is expected to begin in about two weeks.

8. C., Greenville.—Official: The Guaranty & Trust Co. chartered; capital \$100,000; Incorporators, J. M. Geer, J. F. Gallivan, W. C. Cleveland and A. L. Mills; directors. Frank Hammond, president; W. C. Cleveland, vice-president; A. L. Mills, secretary and treasurer; T. M. Marchant, assistant treasurer; J. M. Geer, J. F. Gallivan, H. J. Haynsworth, Lewis W. Parker and J. I. Westervelt. Open for business September 15, with offices in the Fourth National Bank building.

S. C., St. Matthews.—Official: The Farmers' Bank & Trust Co. chartered; capital \$25,00; D. S. Murph, president; B. F. Bruce, first vice-president; M. M. Millan, second vice-president, and L. S. Dreher, cashier. Business will begin September 17.

8. C., Yorkville.—The Farmers & People's Bank & Trust Co., capital \$30,000, with privilege of increasing to \$50,000, is reported chartered; J. M. Stroup is president, W. W. Lewis vice-president and A. M. Haddon cashier.

Tenn., Cleveland.—The People's Bank is reported to have begun business; John T. Hufline, president, and C. H. Stokes, cashier.

Tenn., Nashville.—Reported chartered: The Citizens' Fire Insurance Co. of Shelby county; capital \$25,000. Incorporators, T. L. Campbell, W. E. Coody, R. F. Haun, T. P. Campbell and J. S. Allen.

Tenn., Nashville.—The Wisdom Investment Co. of Hamilton County is reported chartered; capital \$125,600; incorporators, P. P. Wisdom, J. M. Lanier, W. V. Milligan, A. C. Foust and J. L. Foust.

Tex., Bonita.—The First National Bank of Bonita is reported to have filed application for a charter; capital \$25,000. Organizers, W. A. McCall, C. McCall, J. R. Modrall, J. C. Howard and S. H. Camp.

Tex., Grenado.—Reported chartered: First National Bank of Grenado; capital \$25,000. J. E. Harmon, president; E. H. Koch, vicepresident; J. D. Stallworth, cashier, and J. D. Steakley, assistant cashier.

Tex., Mercedes.—Reported chartered: The Mercedes State Bank; capital \$10,000; incorporators, W. S. Hinkley, J. L. Landrum and B. H. Frazier.

Tex., Pharr.—A new bank, capitalized at \$\\$25,000\$, is reported being organized by E. F. is Mayor.

Bollard of Tupelo, Miss., and J. C. Kelly of Phare.

Tex., Pecos.—The Pecos Building and Loan Loan Association is reported organized with directors thus: F. W. Johnson, J. G. Love, Woody Browning, C. L. Heath, Sam Prewitt, J. B. Heard and Ed Vickers. J. S. Long has been elected temporary chairman and Porter A. Whaley temporary secretary.

Tex., San Benito.—Reported chartered: The San Benito State Bank: capital \$10,000; incorporators, A. B. Cole, S. L. Dworman and A. Asheim.

Tex., Texarkana.—The Mutual State Bank & Trust Co., capital \$30,000, is reported organized by E. L. King, cashier of the City National Bank, Dr. E. L. Beck, J. L. Rochelle, A. S. Watlington and others.

Tex., Waco.—The National Exchange Fire Insurance Co. of Waco, capital \$1,000,000, is reported to have filed its charter; incorporators, Gilbert Hay. James B. Parker, W. H. McCullouch, J. H. Lockwood, E. W. Marshull, William C. Abeel, Charles A. Weathered, Sam Sauger, George Clark, Allan D. Sanford, Edward Rotan and S. M. McAshton.

Va., Clifton Forge.—W. F. Tinsley & Co. Incorporated with from \$5000 to \$25,000 capital to do an insurance business. Incorporators, W. F. Tinsley, president: 8. E. Stratton, secretary and trensurer, and F. W. King.

W. Va., Lane Lew,—The People's Bank capital \$25,000, will, it is reported, begin business September 15. Organizers, president, S. G. Hall; first vice-president, G. W. Neely; second vice-president, F. E. Shettercushier, G. B. Waggoner; R. R. Price, George Norris, D. L. Bryan, M. L. Law and T. F. Law.

W. Va., Princeton.—Reported chartered: The People's Bank of Princeton; capital \$50,000, Incorporators, Grover C. Bowling, Byrd O. Yeagergood, Jack Schuyler, A. A. Owen, John K. Ball, R. M. Foster and George W. Lazenby.

NEW SECURITIES.

Ala., Birmingham.—Reported that bids will be received until 3 P. M. September 19 by Culpepper Exum, president Board of Commissioners, for \$1,000,000 of 5 per cent. 30-year funding bonds.

Ala., Dothan.—Official: Bids will be received until 8 P. M. October 2 for \$70,000 of 5 per cent. 20-year water and light bonds; denomination \$1000; dated October 1, 1911. Address R. W. Lisenby, clerk.

Ala., Montgomery. — Reported defeated \$25,000 of water-works construction bonds ment bonds.

Ala., Tuscaloosa.—The question of calling an election to vote on \$35,000 of improvement bonds is reported under consideration.

Ark., Sheridan.—Farson, Son & Co. of Chicago are reported to have purchased \$12,000 of 6 per cent. 5-29-year Sheridan school district bonds at 190.855.

Fla., Bronson.—Reported that the election called for September 28 to vote on Levy county bonds has been postponed. Fred Cubberly of Gainesville is attorney.

Fla., Pensacola.—Reported that bids will be received until noon October 10 by John A. Merritt, chairman Board of Bond Trustees, for \$254,000 of 4½ per cent. 30-year refunding bonds; denomination \$1000; dated October 1, 1911; maturity, October 1, 1941.

Ga., Auburn.—The J. B. McCrary Company, Atlanta, is reported to have purchased \$20,-000 of 5 per cent, sewer bonds.

Ga., Cordele.—Reported that it is proposed to hold an election to vote on \$40,000 of paving, \$30,000 of electric-light, \$20,000 of water and sewer and \$10,000 of school bonds; total \$100,000.

Ga., Greensboro.—Greene county is reported to be considering the question of issuing \$75,000 of road and bridge bonds.

Ga., Macon.—A. B. Leach & Co., New York, are reported to have purchased \$700,000 water-works bonds at \$710,536.

Ga., Moultrie.—An election is to be held in Colquitt county in November, it is reported, to vote on \$390,000 of bonds as follows: \$15,000 for new jnil, \$85,000 for steel bridges and \$230,000 of public-road bonds.

Ky., Harrodsburg.—Reported that an election is to be held in Mercer county to vote on \$50,000 of courthouse bonds.

Ky., Lexington.—An election is to be held, it is reported, to vote on \$150,000 of sanitary sewerage system bonds.

Ky., Pineville.—Official: An election is to be held to vote on \$15,000 of street and \$30,-000 of high-school building bonds.

Miss., Lexington.—Reported sold: \$63,000 of sewer and water-works bonds. H. S. Hooker is Mayor. Mo., Bedford.—September 15, it is reported an election is to be held to vote on \$25,00 of reservoir bonds.

Mo., Canton.—Reported voted: \$10,000 of

Mo., Campbell.—Official: The Compton Bond Co., St. Louis, has purchased at par \$22,000 of 5 per cent. 5-10-year water-works bonds: denomination \$500; dated September 1, 1911.

Mo., Columbia.—Official: Voted Septembe 8: \$100,000 of Columbia Special Road Districtions. John S. Bicknell is City Cierk.

Mo., Kirkwood.—A. G. Edwards & Sons, St. Louis, are reported to have been awarded at 103.541 the \$10,000 of 5 per cent. 10.20-year electric-light plant bonds.

Mo., Webster Groves.—The Wm. R. Compton Bond & Mortgage Co., St. Louis, Is reported to have purchased at \$113 premium \$28,000 of 4½ per cent. 10-20-year school district building bonds.

N. C., Elizabeth City.—Leach & Co., bankers, of New York, are reported to have purchased at par and accrued interest \$120,09 of 5 per cent. 30-year street-improvement bonds.

N. C., Hillsboro.—Reported that the election to be held in Orange county to vote on \$250,000 of highway and other road-improvement bonds has been postponed from November 7 until next March.

ber 7 unfil next March.

N. C., Laurinburg.—Official: Bids will be received until 19 A. M. September 15 for \$20,000 of 6 per cent. 10-30-year Spring Hill township (Scotland county) public road bonds; denomination \$1000; dated October 1, 1911. Address Board of County Commissioners, W. G. Bulo, chairman.

N. C., Mount Olive.—Stacy & Braun of Toledo are reported to have purchased \$12,00 of 6 per cent. 20-year water-works bonds at \$386.49 premium.

N. C., Murphy.—Official: C. A. Webb & Co. Asheville, N. C., has purchased \$10,000 of oper cent. 33-year Valley township, Cherokes county, road bonds.

N. C., Murphy.—Official; C. A. Webi & Co., Asheville, N. C., purchased on September 5 at par \$25,000 of 6 per cent. 20-year water-works bonds; denomination \$500. Address D. W. Sewerse, Mayor.

N. C., South Mills.—The Savings Bank & Trust Co. of Elizabeth City is reported to have been awarded \$5000 of 6 per cent, bonds of school district No. 19 at 101

N. C., Troy,—October 3, it is reported, an election is to be held to vote on \$20,000 of reduced bonds.

N. C., Washington.—Official: Bids will be received until noon October 2 by Wiley C. Rodman, attorney for the Board of Commissioners for Beaufort county, for \$55.00 of 5 per cent. 50-year bonds. G. Rumley is clerk Board of Commissioners.

N. C., Winston-Salem.—Official: December 26 an election is to be held in Salem to vote on \$75,000 of school, street and sewer 20-year bonds; interest not exceeding 5 per cent; denomination \$100, \$500 or \$1000; date proposed January 1, 1912; maturity 1942. F. A. Fogle is Mayor and J. Calvin Tuttle, treasurer.

N. C., Youngsville,—Official: C. A. Webb & Co. of Asheville, N. C., purchased at par and accrued interest \$15,000 of the \$25,000 issue of 6 per cent. 30-year Youngsville township, Franklin county, road bonds; denomination \$1000; dated May 1, 1911. The balance of the issue is unsold. C. C. Winston is secretary.

Okla., Chickasha.—October 17, it is report ed, an election is to be held in Grady count to vote on \$40,000 of bridge bonds.

Okla., Dustin.—Official: Voted: \$25,000 of water-works bonds.

Okla., Enid.—Folds & Co. of Philadelphia are reported to have purchased \$10,000 of 5 per cent. 25-year park bonds at par.

Okla., Lawton.—Thomas J. Bolger Company, Chicago, reported to have been awarded at par \$70,000 of 5 per cent. 25-year school bonds.

Okla., Muskogee.—According to press dispatches the \$500,000 of bonds voted by city and Muskogee county for courthouse will not be issued. It is understood the amount is to be reduced to \$300,000.

H

Okla., Pawhuska.—Petitions are reported to have been presented to the Board of Commissioners of Osage county asking that as election be held to vote on \$100,000 of court-house and jall bonds.

Okla., Soper.—Reported voted: \$13,000 of waterworks bonds.

Okla., Tulsa.-Official: Bids will be re

[For Additional Financial News, See Pages 72 and 73.]

4, 1911.

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Established 1835

The Merchants National Bank

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FIRST NATIONAL BANK

OF KEY WEST, FLA. States Depository and Disbursing Agent.

Agent.
Capital - - \$100,000
Surplus and Undivided Profits - \$40,000

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Delaware Trust Company

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INCORPORATING under broad, liberal, safe
nd stable Delaware laws. A fully equipped
spartment for proper organization and registration of corporations.
BANKING AND TRUST department gives special attention to out of town customers'

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management of property.

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J. ERNEST SMITH, V.-Pres. and Gen. Counsel.
WM. G. TAYLOR. Treasurer.
HARRY W. DAVIS, Secretary.
W.W. PUSEY, 2d Title and Real Estate Officer.

has demonstrated its superiority over other methods of power dis-tribution in that it is

Low in first cost and mainte-

Positive and steady in opera-

Noiseless while running. Unlimited in amount of power

that may be transmitted. All the essential qualities of a pe for driving purposes are

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High in efficiency.

B. Wilcox, President. Blanchard Randall. V.-Pres. m. S. Hammond, Cash. Saml. W. Tschudi, A. Cash. E. Bolling, A. Cash. Raymond B. Cox, Auditor.

The First National Bank

17 South St., Baltimore, Md.

Capital - - - \$1,000,000

Surplus and Net Profits - 560,000

Resources - 9,000,010

Specially well equipped to handle the busines

f Southern Manufacturers, Corporations an andividuals. We invite a call or correspondence.

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The National Exchange Bank

OF BALTIMORE, MD.

Hopkins Place. German and Liberty Sts.

Capital \$1,000,000

Capital \$1,000,000

July 15, 1908, Surplus and Profits \$671,631.60

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SUMMERFIELD BALDWIN, Vice-Pres.
R. VINTON LANSDALE, Cashler.
C. G. MORGAN, Asst. Cashler.
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onds a Specialty. Write us if you have bonds for sale.

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Solicits Accounts of Banks, Bankers, Corporations, and Individuals
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C. D. FENHAGEN, Secretary-Treasurer

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FROM MUNICIPALITIES OR CONTRACTORS are in position to pay HIGHEST PRICES. Write or wire us your offe

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BALANCED valves in steam engines are preferred by well balanced engineers. Saves coal.

Avoids repairs.

ATLAS ENGINE WORKS

Guaranty State Bank & Trust Co.

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Capital, - - - \$400,000.00
Surplus and Profits, 50,000.00
Descrits, - 2,500,000.00
Largest State bank in Texas. A General Banking and Trust Business. Ask us about our 6% Real Estate Mortgages.

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FOR SALE Timber, Phosphate, Coal, Iron, Farm, Ranch, and Other Properties and Investments, in Southern States, Cuba and Mexico. SOUTHERN STATES DEVELOPMENT CO. GEO. B. EDWARDS, President, Tribune Bidg., 154 Nassau St., New York, N. Y. Connections in the Principal Cities of Europe.

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Fidelity and Deposit Co. OF MARYLAND BALTIMORE, MD

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Assets Over \$5,000,000

Pioneer Surety Co. of the South. Becomes Surety on bonds of every de-

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Municipal Bonds Purchased

Correspondence invited from Investors wishing to sell their holdings of seasonal marketable Municipal Bonds, and from municipal officials and contractors in connection with entire new issues.

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"AMERICAN" TRANSMISSION ROPE

An outdoor drive between buildings, 106 feet between centers "American System"

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FOR LONG DRIVES INDOORS OR OUTDOORS

MANILA ROPE TRANSMISSION

It is weatherproof and is not affected by exposure to heat, cold or isture. It requires no external dressing of any kind, as it is selflubricating and stretched in process of manufacture.

We also manufacture Manila, Sisal and Jute Rope, Bale, Hay and Hide Rope, Lath, Yarn and all kinds of Bundling Strings.

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American Manufacturing Co.

Largest Workers of Fibre in the World 63-65 Wall Street New York City

ADDITIONAL CAPITAL FOR DEVELOPMENT OF YOUR BUSINESS.

THE LARGEST BANKING CAPITAL IN THE SOUTHERN STATES. and during 27 years' direct Southern affiliation has been actively engaged in p

INTEREST PAID ON DEPOSIT ACCOUNTS.

Mercantile Trust and Deposit Company

OF BALTIMORE

A. H. S. POST₁-President Capital and Surplus, \$4,500,000

ceived until 1.30 P. M. September 25 for \$500,000 of 5 per cent. 25-year bonds of road district No. 1, Tulsa county. R. E. Curran Is County Clerk.

Okla., Wapanucka.-Reported voted: \$7000 of 6 per cent, 20-year water-extension bonds.

8. C., Charleston.—Reported that bids will be received until noon September 25 for \$25,000 of 4 per cent, sewerage bonds; dated October 1, 1309. J. O. Lea is City Treasurer.

S. C., Dillon.-Official: Bids will be re-ceived until October 1 for \$39,000 of water-works and \$38,000 of sewerage 20-40-year bonds; interest not to exceed 5 per cent. Address E. R. Hamer, chairman

S. C., Honea Path.-J. H. Hilsman & Co. are reported to have been awarded \$26,000 of water-works and \$11,000 of electric-light 5% per cent. 20-40-year bonds.

S. C., Kingstree.—Reported that an election is to be held the latter part of September to vote on water-works bonds

C., Sumter. — The \$150,000 of Sumter county highway bonds have, according to press reports, been declared valid.

Tenn., Athens.-Woodin, McNear & Moore of Chicago are reported to have purchased \$25,000 of McMinn county bridge bonds; also \$300,000 of 5 per cent, road bonds.

Tenn., Bristol.—Reported that bids will be received at any time by John C. Andersen. chairman finance committee, for \$10,000 of 5 per cent. 30-year water-extension bonds; denomination \$10.00; dated October 1, 1211; maturity October 1, 1241.

Tenn., Clarksville.—The Provident Bank & Savings Co. of Cincinnati is reported to have been awarded at par \$60,000 of 4½ per cent. 30-year water-works bonds; denomination

Tenn., Crossville.—Official: Bids will be received until noon September 15 for \$40,000 of 5 per cent. 20-year Cumberland county goodroads bonds voted July 10, 1911; denomination \$500; dated October 2, 1911. Address John S. Reed, First National Bank, Cross-ville.

Tenn., Payton.-Official: Voted August 28: \$25,000 of waterworks construction K. M. Benson is Mayor.

Tenn., Elizabethton.-J. N. Edens, s tary Road Commissioners Carter county, will, it is reported, receive bids at any time for \$60,000 of 5 per cent. 20-year road bonds.

Tex., Aransas Pass.—Official: The State has purchased at par and accrued interest \$20,000 of 5 per cent. 10-40-year school-building bonds voted July 24; denomination \$1000.

Tex., Austin.—The Attorney-General has approved securities as follows: \$20,000 of 5 per cent. 10:20 year Wise county common school district bonds: \$15,000 of 5 per cent. 20:40-year Granger street-improvement bonds; 20-to-year Granger street-improvement bonds; \$7000 of 4 per cent. 3D-year Maverick count; road and bridge bonds; \$25,000 of 5 per cent. 20-10-year Port Arthur Independent school district bonds; \$90,000 of 5 per cent. Nacog-doches courthouse and jall construction bonds; \$1000 of 5 per cent. 2D-year bonds of honds: \$3000 of 5 per cent. 29-year touns of Matagorda county common school district No. 11; \$2000 of 5 per cent. 10-20-year Wash-ington Heights independent school district bonds: \$2000 of 5 per cent. 10-20-year Wood county remmon school district No. 60 school-

Tex., Bay City.—Reported that an election is to be held to vote on bonds for sewer sys-tem and fireplug extension.

Tex., Beaumont. — Arrangements are reported below made for issuing the \$25,000 of abattoir, \$5,000 of jall, \$50,000 of sewer, \$50,000 of park, \$25,000 school and \$25,000 of street-

Improvement and repair bonds recently voted. E. A. Fletcher is Mayor.

Tex., Belleville.—Bids will be received un-Tex., Belleville.—Bids will be received un-til 2 P. M. October 7 for \$100,000 of district No. 1, \$50,000 of district No. 2 and \$25,000 of district No. 3 5 per cent. 5-40-year Austin county road bonds; denomination \$1000. Ad-dress C. G. Krueger, County Judge.

Tex., Fairfield.-Reported that an election will probably be held in Freestone county to vote on \$25,000 of bonds for grading public ds for grading public oads in Fairfield district.

Tex., Farmersville.—An official letter con-irms report that \$10,000 of 5 per cent. 30-40-cer street-improvement bonds have been old. J. P. Huddleston is Mayor.

Tex., Frisco.—Official: Bids will be re-ceived until October 1 for \$13,500 of 5 per cent. 20-40-year independent school district building and equipping schoolhouse bonds: dated May 1, 1911; denomination, 12 bonds of \$1900 each and 1 bond of \$590. F. P. Shra-der is secretary board.

Tex., Gorman.—Reported that \$29,000 of 5 per cent. 29-40-year school bonds have been purchased by the W. O. W. Lodge of Omaha. Neb. D. G. Stevens is secretary School Board.

Tex., Harrisonburg.-Reported that \$15,000 cent. 49-year Harrisonburg school district, Harris county, bonds have been pur chased by a Detroit banking firm.

Tex. Houston.-October 10, it is reported. Houston Heights will vote on the question of Issuing \$180,000 of boulevard bonds.

Tex., Palestine.—A. L. Bowers, Mayor, will, t is reported, receive bids until noon Sep-ember 14 for \$29,000 of 5 per cent. 40-year It is reported tember 14 for school bonds.

Tex., Port Arthur.—Press dispatches state that \$25,000 of school bonds approved by the Attorney-General are to be sold as soon as

has purchased at par and accrued interest \$16,000 of 5 per cent, school bonds; denomination \$500; dated September 1, 1911.

Tex., Tilden.—McMullen county is reported o have voted \$35,000 of road-improvement

Tex., Wichita Falls .- Official: Precinct 1. Wichlta county, will vote October 13 on \$50,

Va., Charlottesville.—Official: Voted: \$26, 000 of 1-13-year gas-plant improvement bonds

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BOSTON, MASS.

Rates Moderate. Absolutely Fireproof. Free Transfer Baggage from and to Sta-

tion.
Terminal of Trains from South and West.
Also Plaza Hotel, N. Y.

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F. A. HAMMOND, President

"Norbrassco" Talks

To the Man who does not know of a thing it does not exist. There are in these United States thousands who constantly need what we have long concentrated our skilled energies upon making, but who never so much as heard of us We make faultless castings in Brass, Aluminum, and the various special Bronzes, Castings of all kinds and sizes. but of only one quality. Some Definite "Light" shed for the asking of

The Norwalk Brass Co., Norwalk, Conn.

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OLD BAY LINE,
FOR OLD POINT COMFORT, NORFOLK
AND PORTSMOUTH,
CONNECTING WITH ALL RAIL LINES
SOUTH AND WEST.
THROUGH TICKETS TO ALL POINTS.
Freight received and forwarded every weekday, and Bills of Lading issued to all points South and West and for Richmond. Norfolk, Portsmouth, Old Point Comfort and Mathews and Gloucester Landings. Splendid Steamers Florida, Virginia or Alabama-finest south of New York, equipped with United Wireless Telegraphy. Leave Company's Pier, Light St., foot of Barre St., daily, including Sunday, at 6.39 P. M.
Tickets to all points and staterooms reserved at Ticket Office, 107 E. Baltimore St.; S. A. L. Ry, Ticket Office, Baltimore and Calvert Sts.; Albaugh's, 2 E. Fayette St., and at 500 Light St.
P. BYRD THOMPSON.

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at 500 Light St.
P. BYRD THOMPSON,
Traffic Manager.
JAMES E. BYRD,
General Passenger Agent.

JOHN R. SHERWOOD, President and General Manager.

CHARLES NEVILLE Accountant and Auditor

BUSINESS SYSTEMS 212-213 National Bank Building SAVANNAH, GA.

Long Distance Phone References—Any Bank in Savannah

CRUSSELLE AUDIT CO.

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1006 Candler Bldg. ATLANTA. GEORGIA

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CHARLES L. HEHL, C. P. A., President JOHN KÜCHLER, C. P. A., Vice-President

ELMER L. HATTER, C. P. A., Treasurer ERNEST E. WOODEN, C. P. A., Secretary

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The Savannah Bank & Trust Company

SAVANNAH, GEORGIA

Capital and Surplus - - \$1.200,000

OFFICERS

WM. F. McCauley, Pres. Cashier—Sam'l L. Clay. Chas. G. Bell, Vice-Pres. Asst. Cashier—M. D. Papy.

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CONDENSED REPORT TO COMPTROLLER

The First National Bank

OF BIRMINGHAM, ALA.

ALABAMA'S FIRST MILLION-DOLLAR BANK

FRIDAY, SEPTEMBER 1, 19 1.

	RESOU	Į	3	C	1	E	S	,	
1	Discounts	0		0		0			767

CASH
In Vault.....\$1,466,520.91
With Banks. 1,647,967.85
With U. S.
Treasurer.. 87,100.00

\$ 3,201,588.76 \$12,966,173,86

LIABILITIES

Capital Stock.....\$ 1,500,000.00

DEPOSITS

Individual \$7,791,128.33 Bank...... 845,619.80 United States. 100,000.00

\$ 8,745,748.13

\$12,966,173.86

OFFICERS

W. P. G. HARDING, President

J. H. WOODWARD, Vice-President THOMAS HOPKINS, Cashier THOMAS BOWRON, Asst. Cashier

J. H. BARR, Vice-President F. S. FOSTER, Asst. Cashier

RON, Asst. Cashier J. K. FLEMING, Asst. Cashier J. E. OZBURN, Secretary Savings Department J. H. WETMORE, Auditor

PARTICULAR ATTENTION GIVEN TO COLLECTIONS DIRECT CONNECTIONS AT ALL ALABAMA POINTS

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Santo Domingo Planters Company Formed

to cultivate on the Island of Santo Domingo

SEA ISLAND OR LONG STAPLE COTTON

which always commands a very great premium over average staple cotton of American growth, and has never been in adequate supply.

The subscribers to \$100,000 preferred 8% cumulative stock (\$10 per share par) will receive a bonus of \$100,000 common stock (\$10 per share par) and will control the company in every way for four years.

We have consented to act as Bankers for this Company. First, because of our long experience in the Cotton Markets-since 1869; Second, because of the great merits of this proposition; Third, because entire control of management is conceded to Subscribers.

Prospectus and all information in detail on application to

20 Broad St., New York ATWOOD VIOLETT & CO.,

Members N. Y. Cotton Exchange.

Members New Orleans Cotton Exchange

Liverpool Cotton Assn. (associate).

Va., Harrisonburg.-Press dispatches state

Va., Richmond.—The City Council is re-ported to have authorized the issuing and ale of \$1,400,000 of improvement and \$1,000,-00 of street-improvement bonds.

W. Va., Logan.—Official: Cutter, May & Co., Chicago, purchased on August 26 \$15,009 of 5 per cent. 10-30-year street-improvement bonds voted June 10, 1911; denomination \$500. I. P. Baer is City Attorney.

W. Va., Point Pleasant.—Bids will be received until 2 P. M. October 2 by G. E. Childs, Recorder, for \$6000 of 6 per cent. 10-35-year municipal bonds; denomination \$100.

At Dothan, Ala., bids will be received until § P. M. October 2 for \$70,000 of 5 per cent. Byear water and light bonds. Further particulars will be found in the advertising relumns.

At Washington, N. C., bids will be received until noon October 2 for \$35,000 of 5 per cent. Seyear Beaufort county bonds. Further particulars will be found in the advertising

At Dillon, S. C., bids will be received until October 1 for \$33,000 of water-works and \$38,000 of sewerage 20-40-year bonds; interest not to exceed 5 per cent. Further particulars will be found in the advertising columns.

At Tulsa, Okla., bids will be received until 130 P. M. September 25 for \$500,000 of 5 per cat. 25-year bonds of Road District No. 1. Tulsa county. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

Under date of September 8, 1911, announcement is made that the co-partnership heretofore existing between T. Edward Hambleton, John M. Nelson and J. Henry Cook,
under the title of Hambleton & Company,

Interest not to exceed 5 per cent.; denomination \$2000; date of opening bids not yet decided; R. W. Halsinger, C. W. Hulfish and H. D. Jarmans, officials in charge. E. G. Haslen is Mayor.

The Citizens and People's National Banks

The Bank of Crawford, at Crawford, Ga., according to press dispatches, has increased its capital from \$25,000 to \$59,000. John F. Holden is president.

The Sumter Savings Bank of Sumter, S. C., is reported considering the question of increasing its capital from \$25,000 to \$125,000.

The Bankers' Trust Co. has, according to press dispatches, absorbed the Texas Trust Co., both of Houston, Tex. The consolidated companies have a capital of \$2,000,000, with approximately \$900,000 of surplus and accrued

A Bargain in Brick Machinery

Having decided to install dry-press machinery, we are offering a most complete outfit of J. C. Steele & Sons No. 3 equipment for making end-cut stiff-mud brick, together with boiler and engine. All is practically new and in first-class running condition, and is a real bargain to anyone who is going into the brick business. For further information address

Heavy Circular Saw Mill Machinery FOR SALE

One heavy circular-saw mill, complete; endless chain log jack, live rolls, twin engines, bollers, pulleys and shafting; 150 H. P.; been used.
Also, one heavy circular mill without bollers; twin engines, 200 H. P.
One Wickes gang No. 5.
The above mill and gang never used. The mills will be sold as a whole or in part.
Also, two (2) Flory skidders, 30 H. P. and one 65 H. P.; been used, but in good working order.

THE CHAMPION FIBRE CO., Canton, N. C.

PROPOSALS

CONSTRUCTION BONDS.

MISCELLANEOUS.

Water-Works Material and Equipment

Bids will be received by the Town of Haileyvifle, Oklahoma, and publicly opened at 4.30 P. M. September 25, 1911, for the purchase by said city of 2909 feet of 4-inch Class C: 1909 feet 6-inch Class B: 1000 feet 6-inch Class B: 1000 feet 6-inch Class C: one 500-galon single-acting triplex pump direct connected to one 50 H. P. electric motor: 15 standard fre hydrants and 12 valves. Full list of requirements can be had by addressing O'Neil Engineering Company, 1508 Practorian Building, Dallas, Texas. Certified check of 20 per cent. of amount of bid will be required.

NOTICE TO CONTRACTORS.

Scaled proposals for the general construction of an elght-story fireproof hotel build-divided to the Midland City Hotel Company, Macon, Georgia. Will be received by the building committee at the bidself one of the President, R. F. Burden, Macon, Ga., on or before five P. M. September 30, Ga., on or before five P. M. September 30, Ballist of requirements can be had by addressing O'Neil Engineering Company, 1508 Practorian Building, Dallas, Texas. Certified theck of 20 per cent. of amount of bid will be received by the building committee at the Buildens' Exchange, Atlanta, Ga.; Baltimore, Md., or at the office of the Architect, W. L. Stoddart, 30 West 38th St., New York city.

Dam and Spillway

NOTICE TO CONTRACTORS.

NOTICE TO CONTRACTORS.

McAlester, Okla.

Notice is hereby given that sealed bids for the construction of an earthen dam and concrete-lined spillway for the city of McAlester, on the city water reserve, will be received by said city up to 9 o'clock A. M. on the 23th day of September, 1911.

All bids must state at what price the bidder will construct said dam and spillway in accordance with the plans, specifications and drawings of the City Engineer, now on file in the Cierk's office, must be in duplicate, one copy must be filed with the City Clerk and one with the Mayor, and each bid must be accompanied by a certified check, payable to the Commissioner of Finance. In an amount equal to 2½ per cent. of the bid submitted. The successful bidder will be required to make bond in the amount of the contract price for the payment of all labor and material as required by law, and a bond to the city of McAlester for said amount, protecting said city against all loss and damage, and for the faithful performance of the contract. Checks of unsuccessful bidders will be returned, and that of the successful bidder will be retained until be shall comply with the terms of his bid and this notice, and in the event of his failure to do so within ten days after acceptance of his bid, his check will be forfeited to the city as liquidated damages resulting to the city from his failure to carry out the terms of his bid. The contract will be let to the lowest responsible bidder, the right being reserved to reject any and all bids.

Plans and specifications for the use of sub-bidders will be on file as above noted.

R. F. BURDEN,

President Midland City Hotel Company,

Dated at Macon, Ga., September 12, 1911.
See

See
The Record and Guide, 11 East 24th St.,
New York city.
The Manufacturers Record. Baltimore, Md.
The American Contractor, Chicago and
New York.

Hotel Building

NOTICE TO CONTRACTORS.

Blank forms of proposals, drawings and specifications for the exclusive use of the bidders may be obtained only upon written request or telegraph application, accommonded by a cash or draft deposit of fifteen (\$15) dollars, to the Architect, W. L. Stoddart, 29 W. 38th St., New York. Said draft or deposit to be refunded, less the cost of production, upon return of the drawings and specifications will be forwarded by express immediately upon receipt of deposit required, and bidders are requested to make early application for same.





Vine Street, Lincoln, Neb. Brick Pavement Filled with Barrett's Paving Pitch.

Evidence from Lincoln

The above illustration shows Vine Street in Lincoln, Neb., laid in August, 1909, with brick, the joints of which were filled with Barrett's Paving Pitch.

In January, 1911, Engineer Dobson stated "Vine Street is one of the best streets we have in Lincoln."

In October, 1910, a local newspaper, in referring to the cut made in the pavement for the crossing of the Rock Island Railroad, stated, "The Vine Street Paving shows up well where the cuttings have been made. The work on this paving was done well, and City Engineer Dobson regards it as one of the best jobs of paving in the city. Pitch filler was used on this street, and it shows up much better than sand filler. The Pitch filler permits no vibration or

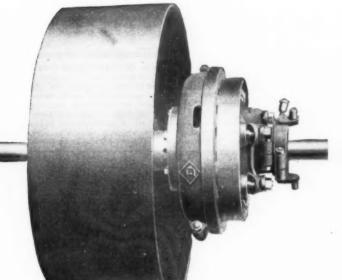
looseness, and yet it does not make the brick surface to solid, as in the case of the cement grout. Where cement filler is used, Mr. Dobson said, even with the expansion line, there is some danger of expansion, causing the surface to arch slightly."

Pitch filler is ideal for brick pavements, because it is neither too soft nor too hard. It has sufficient body to protect the brick against shifting and grinding but not so much as to make the pavement an arched monolith. Cementfilled pavements constantly give trouble because of the ineffective provision for expansion and contraction. Special expansion joints are both a clumsy and unsatisfactory expedient. With Barrett's Paving Pitch "every joint is an expansion joint." Booklets on request. Address our nearest office.

BARRETT MANUFACTURING COMPANY

New York Chicago Philadelphia Boston Minnneapolis St. Louis Cleveland Pittsburg Cincinnati Kansas City New Orleans Seattle London, Eng.





DODGE
Split Friction
Clutch

Safeguard Your Men and Your Machinery

THE problem of safety to your employe—now demanded by the stringent factory laws in most States;

The problem of eliminating waste power in idle departments of your plant;

And of keeping the rest of your machinery going when some little thing goes wrong, or when you must stop to make an installation in one department;

These all are solved by the Dodge Split Friction Clutch.

With it you can drive your machinery in *independent* groups, without expensive alterations of your present system.

The Dodge Idea reduces accident risk to a minimum.

In case of any accident, when quick action will save a life or limb, the Dodge Friction Clutch provides instant release in the nick of time.

Every year factory laws are becoming more rigid on this point. Some State laws (Illinois for instance) clearly specify that a friction clutch *must* be used.

If there is no such law in your State, you cannot tell how soon there will be one. Be prepared.

The Dodge Friction Clutch puts you on the safe side at small expense. It is split. That means it can be put up or taken down without disturbing other equipment. It is interchangeably useful for pulley or sheave driving, or for cutoff coupling service, or for attachment to a quill carrying a main driving wheel.

The pulley it carries may be changed at will, or the clutch itself transferred from place to wanted, and used either as a pulley driver or shaft coupler.

For every ordinary use, the Dodge Friction Clutch, which is standardized, may be obtained in stock sizes from Dodge dealers and branches everywhere, on short notice.

Our engineering department will gladly give you correct advice on subdividing your power transmission machinery into separate, safe and efficient units. Write for booklet on the Dodge Friction Clutch.

DODGE MANUFACTURING COMPANY

Everything for the Mechanical transmission of Power OFFICES AND WORKS: MISHAWAKA, INDIANA

Branches and Warehouses Carrying Complete Stocks:

New York, Cedar and Washington Sts. Cincinnati, 126-128 W. Third St. Chicago, 202-214 S. Clinton St. Boston, 137-139 Purchase St. Brooklyn, 37th St. and Second Ave. Minneapolis, 202-04 Third St. S. Atlanta, 54-60 Marietta St. Philadelphia, 815 Arch St. St. Louis, 507 N. Main St. Pittsburg, 337 Second Ave.

Classified Opportunities

WANTED—Traveling or local men: all sections of the country; profitable side line: commission or salary; good men average \$100 weekly. For particulars address The Sun Chemical Company, Richmond, Va.

SALESMEN. — To sell high-grade driers and paint oil on commission basis. State territory. Address Box 135, Collinwood, Ohlo.

LEATHER BELTING MANUFACTURERS

WANTED—An engineer to invest several thousand dollars in a reliable company in Central West; must have experience as salesman. Address No. 844, care Manufac-turers Record.

WANTED—Real salesmen acquainted with building and contract work to handle con-crete mixers. The American is a batch mixer giving a perfect mix either wet or dry. It is sold under a liberal commission arrangement without requiring any financial investment by the agent. A good seller in other sections and should prove attractive in the South with pushing. Address Cargill Mfg. Co., 567 Buttles Ave., Columbus, O.

AGENTS WANTED to sell lubricating oils, belts, hose, paint, varnish, to contractors, auto owners, mills, factories, etc. Exclusive territory to right party. Oil experience uncecessary. Manufacturers' Oil & Grease Co., Cleveland, Ohio.

SUCCESSFUL business man with more han a million acres of land for sale in the est agricultural, truck farming and orange rowing district of Old Mexico wishes part-ier with \$25,000. Several hundred thousand follars can be made in two or three years in he sale of this land. References. Investi-ate. Address W. S., 303 Moore Building, out Worth, Texas.

PAVING SOLICITOR WANTED.—Wanted
—A man to solicit paving business from municipalities; one accustomed to dealing with
eity officials and who knows paving construction preferred; state age, experience and
references; good salary to first-class man
who can secure contracts. Address No. 846,
care Manufacturers Record, Baltimore, Md.

SALES AGENTS to sell feed-water heaters, evaporators, condensers and other power-plant equipment; guaranteed territory; com-nission. Address Fisher, 90 West St., New

AGENTS wanted in every city and town for best-selling automobile specialty; large demand for goods; success assured. Ray Specialty Co., Box No. 198, Petersburg, Va.

WANTED—A PARTNER.—An experienced and efficient man to take entire charge of a handle factory; must show that he is capable, efficient, honest, and able to take an interest in the business. The plant is located in Arkansas, with an abundance of timber, and now has enough orders ahead at good prices to take the entire output for at least three months. We have an established trade, and for an ambitious efficient man this is an opportunity. Address No. 851, care Manufacturers Record.

an energetic man (who can hand emis) with the secret formula and thight to market our Sprays in an in the Union for \$100, \$5000 to \$10,00 can be easily and honestly mad articulars with testimonials from the Co., 5 North 7th St., Richmond, Va.

WANTED - Superintendent and manager by a new company just organizing in the South to manufacture church furniture; a competent man familiar with this line of business and able to invest some capital, having ability to take entire charge of the business. The company has ample capital, with buildings and machinery ready for operation. Address Southern Church Furniture Co., care of Manufacturers Record, Baltimore, Md.

AGENCIES WANTED

NEWLY-ESTABLISHED COMPANY wants

WANTED-Agency for novelties in hard-are special machinery, tools, wrenches, etc. access Novelty Co., Inc., Richmond, Va.

A MAN with \$2000, practical in the manu-teture of furniture, desires to connect with factory or organize a plant, to act as fore-an, superintendent or manager. Address o, 850, care Manufacturers Record.

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more. 15c. per line.

RESPONSIBLE young business man, with everal years' road eperience, familiar with he trade of this city and adjacent territory, seircs connection with reliable concern seek-ng representation in this section; salary or ommission; references. Address W. H. Carle, El Paso, Texas.

Earle, El Paso, Texas.

SITUATION as office manager or credit and in a Southern or Southwestern city; 5 years' experience; up-to-date methods; best eferences as to qualifications and ability. Address W. C. Darrow, Gen. Del., Pittsburg, Pa.

MUNICIPAL ENGINEER, college and university technical education, M. Am. Soc. C. E., thoroughly experienced in design and construction of water-works, sewerage system, streets and pavements, bridges, concrete and other masonry, and in the development of suburban properties, parks, estates, etc., desires responsible position with a city, consulting engineer or contracting firm; best of references cheerfully furnished. Address No. 836, care Manufacturers Record.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTI-TUTE, TROY, N. Y.—Courses in Civil, Me-chanical and Electrical Engineering, and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), and Bachelor of Science (B. S.). Special courses in engineering and science. Splendidly equipped new engineering laboratories. Send for catalogues to Registrar.

COMMERCIAL STATE BANK, Birming-ham, Ala. State depository, Prompt atten-tion to Alabama collections.

THE PALMETTO NATIONAL BANK, Co lumbia. S. C., capital \$250,000, solicits ac counts of banks, firms, corporations and indi viduals, either commercial or savings accounts

HOTEL FOR SALE

HOTEL FOR SALE.—One of the finest totels on the Galveston Beach, consisting of 10 rooms, with modern conveniences; all car mes pass the hotel; one block from the opular bathhouses; surrounded by all the cach amusements. This hotel faces the fulf of Mexico, located on the Galveston feaulfful boulevard, has an elevation of 22 cet above the gulf, has the reputation all ver the State of Texas as one of the best otels in Galveston. Here is an opportunity or a good hotel man. Galveston Beach is rowing more popular every year. Write for urther particulars, J. L. Boddeker & Co., grents, 410 20th St., Galveston, Texas.

WINTER RESORT PROPERTY

WINTER RESORT PROPERTY

WINTER-RESORT PROPERTY.—I have a lots, platted, and map recorded; this property is inside limits of one of the prettlest and most tropleal appearing towns in Florida; one that appeals to the Northern tourist; property is near postoffice, depot, steamship dock, schools and churches; has considerable pine and other trees on lots; the best drinking water in the State here, as well as medicinal waters; an old tourist town and attractive place for people desiring quiet, pleasant winters with good fishing, funting, boating and bathing. Will sell whole or retain half interest. Money should double this winter. A. W. Brown, Enterprise, Fla.

BUSINESS OPPORTUNITIES

ROLLING-MILL OPPORTUNITY. — Rail and structural mill company desires the services of a gentleman to act as secretary and take charge of certain branch of business; must invest \$10,000 to \$20,000 in stock of company and will receive \$200 per month salary. Address No. 852, care Manufacturers Record.

Address No. 852, care Manufacturers accounting advertising or booming of towns, cities, counties, States, is taught by us only. This is one of the most promising and profitable of occupations. The Advertiser of Battimore, Md., gets \$10,000 a year. We wish one or two students in every place reached by this publication. Send at once for particulars, etc., to Advertising School, care Manufacturers Record, Baltimore.

POSITION on salary for several ladies gentlemen having ready cash to take an terest in manufacturing business either office or to travel; company now establis ing several plants; needs more capital; of gaged in manufacturing line of special; of ddress No. 853, care Manufacturers Reco

LOT SALES.—If you own land adjoining a thriving city, lay out a subdivision and let us sell the lots. Our red tag plan is the biggest kind of a money-getter. We want to handle a few more sales yet this season, and take this method of getting in direct touch with owners of sub-division property throughout the country. For terms and full particulars address Tom Magruder, Gen. Mgr., Evansville, Ind., 534 Jefferson Ave.

MANUFACTURERS producing articles of merit suitable for the mall-order trade will please send information and catalogues to Box 44, Jacksonville, Fla.

TURPENTINE.—We hold thirty years' lease under official sanction on three million acres turpentine pine in Mexico; solid body; annual rental \$7500. Will take stock in full consideration in company composed of reliable naval stores operators, organized to take over the lease and exploit property, or act as holding company for purpose of subletting. Full details to earnest inquirers with financial standing. The C. E. Way Land Co., Suite 514 Frost Building, San Antonio, Texas.

FACTORIES LOCATED, factory buildings in the principal cities to rent, factories, sawmills, flour mills, warehouses, real and personal property sold or exchanged. Timber, grazing and farm lands sold or exchanged. Timber, grazing and farm lands sold or exchanged. Office space, desk rooms and Chicago addresses arranged for. High-class manufacturing stocks and bonds for sale and exchange. Office what you wish to sell, inquire for what you wish to buy. Negotiations confidential. Business promptly executed. Correspondence invited. Kreis & Company, 167 W. Washington street, Chicago, Ill.

MAPS AND BLUE PRINTS

MAPS OF TEXAS COUNTIES.—We make lueprint maps of nearly all Texas counties nd several Louislana parishes. Write for rices on those desired. Singleton Bryan & o., Beaumont, Texas.

FREE SITES and other liberal assistance; heap fuel; natural gas, oll, coal and abund, nt water; six railroads. Address Chamber f Commerce, Wichita Falls, Texas.

BARGAIN in warehouse and factory sites on B. & O. R. R. at Pa. Ave. and 22d St. 8. E.; sewer, water, gas, electric power and ight; 29 minutes on Capt. Traction R. R. o 7th and Pa. Ave. N. W. R. F. Bradbury, 228 Pu. Ave. S. E., Washington, D. C.

IF you are interested in purchasing a high-rade typewriter and do not care to invest fog asked by the manufacturer, we would ke you to investigate our remanufactured uachines. Enterprise Exchange, Inc., 609 E. Baltimore St., Baltimore, Maryland.

LOCATIONS SECURED

INDUSTRIES WANTED

WANTED.—Asheville, N. C., has 38 miles paved streets: unlimited supply of pure water: cheap electric power; has within radius of 100 miles of city 15,000,000,000 feet saw timber, 6,000,000,000 spruce, 3,000,000,000 hemicleck, 6,000,000,000 hardwood; has in addition 2,000,000 cords pulp wood, 1,000,000 cords hemicleck pulp wood, 9,000,000 cords chestnut acid and pulp wood, 6,000,000 cords of other timbers suitable for stave material, and not a stave factory in entire territory. Write Board of Trade.

MISCELLANEOUS

YOUR FACTORY AT TULSA will command the Middle West; natural-gas power only \$2 to \$5 H. P. per year; 26,000 population; ample labor, materials; great oil and coal fields; on large river; four trunk railways; \$3 thriving factories aiready. Write Bureau of Information, Tulsa, Oklahoma.

Bureau of Information, Tulsa, Oklahoma.

CLEVELAND, TENN., WANTS YOU.—The best town in the Southeast, with a hydroelectric development of 32,000 initial horse-power for manufacturing purposes, final development 82,000 horse-power. Free manufacturing sites; exemption from city and county taxes; nample railroad facilities; spring water pumped to all parts of the city; cheap raw materials: 186 miles of pike roads in county; fine farming and trucking section; best of public utilities; cheap white labor; cheap power; ideal location for cotton mill, furniture factory and brick-manufacturing plant; good climate; most rapidly developing city in the Southeast. Write Commercial Club, Cleveland, Tennessee.

VICTORIA, TEXAS, head of navigation of Guadalupe River: center of cotton, corn, truck and citrus fruit-growing district of South Texas; country rapidly developing; opportunities for many industries. If interested in the coastal section of Texas, write for booklet "D" to the Secretary of the Progressive League.

SUFFOLK.—The best manufacturing and distributing point in Virginia; six railroads and water transportation; plenty of labor; cheap fuel; electric power; seventy manufacturing plants in successful operation; opportunity for furniture and woodworking plants and any wholesale, jobbing or manufacturing business; center of idewater; richest farming section to be found; health; excellent schools and churches; filtered water, gas and sewer. Write Board of Trade, Suffolk, Va.

"BUSIEST AND BEST BUILT CITY IN TEXAS," Wichita Falls possesses unsurpassed natural resources and advantage. Offers exceptional opportunities for Inventors; free sites for manufacturing establishments; cheap fuel; natural gas, oil; coal, electricity and abundant water from the largest body of water in Texas; six railroads; raw material at hand; latest approved public utilities; creosoted wood block grown and the largest body of water in Texas; section; over fifty miles concrete sidewalks. Most rapidly developing city in Southwest. Handous booklet and detailed information upon request. Address Chamber of Commerce, Wichita Falls, Texas.

MILLEDGEVILLE, GA., with its light-haustible supply of hardwood and kaolin, central location, low freight rates, excellent transportation facilities and ideal climate offers unusual opportunities for manufacturing industries of all kinds. Before locating elsewhere write Young Men's Business League.

INDUSTRIAL PLANTS FOR SALE

BRICK PLANT

BRICK PLANT
BRICK PLANT FOR SALE.—Modern, up
to-date brick plant in Georgia, now in operation, making 25,000 common building brict
per day; only one in this locality; compite
set of grinding machinery, 75 H. P. engine,
steam drier, plenty of clay, labor, wood, etc.;
best of reasons for selling; good proposition
for a live man who can give it his time.
Address No. 806, care Manufacturers Record.

ELECTRIC LIGHT AND POWER PLANT

ELECTRIC LIGHT AND POWER PLANT for sale, consisting of one 11x10 Ideal engine, with D. C. 40 K. W. Westinghouse generator; one 11x12 Ideal engine, with D. C. 50 K. W. Westinghouse generator; battery of two % Westinghouse generator; battery of two % H. P. return tubular boliers, pumps, heaten, etc.; all in first-class condition; can be seen at the Title Guarantee Building, Birmingham, Ala., where it will be in daily use until October 1 next. An opportunity for securing a first-class plant cheap. Address Title Guarantee Loan & Trust Co., Birmingham, Ala.

LUMBER MANUFACTURING PLANT

FOR SALE—180,000 acres L. L. pine complete modern mill costing over 3600, a going plant; will cut one and a half lion feet and three million cords pulpwellind can be colonized and sold for more tpurchase price. We have several smaplants for sale also, and large tracts of ber lands. James & Colby, Galveston, To

FOR SALE—Complete lumber manuing plant, consisting of two-band-say planning mill, box factory, oak-flooring dryklin, office, store, blacksmith she thirty-five dwelling-houses, besides barn, cornerib, icehouse, etc.; about forty-five acres of river bottom land, sive of the buildings; situated at the ing of the Kentucky River and L. & Nroad. Parties quitting business for preasons and will sell at a reasonab gain price. For full particulars a The Burt & Brabb Lbr. Co., Ford, Ky.

FOUNDRY AND MACHINE SHOP

FOR SALE.—I will sell for \$5500 cash, or part cash, a first-class foundry and machine shop, worth \$10,000, in good live Kentucky town of ten thousand people; in operation and doing well; an opportunity of a lifetime for a practical man. No trades or combinations considered. Address No. 847, care Manufacturers Record.

WATER POWERS AND MISCELLA-NEOUS PROPERTIES

FOR SALE—95,000-acre tract Fiorida timber land; well located; deep-water transportation; cruiser's report, 700,000,000 fed; 000,000 op pine, 250,000,000 red cypross, 50,000,000 maple, ash and hickory; easily logged. Address J. B. Jarvis, P. O. Box Ed, Chlumbua, Mexico.

hua, Mexico.

SHIP CHANNEL FRONTAGE —1800 acres fine black prairie land between Houston and the bay, fronting 1½ miles on Houston Ship Channel; small amount of beautiful timber along water frontage; high banks; Southern Pacific Railroad and Houston Bay Shern Shell road through south edge of property; railroad station on land; high and will drained; beautiful factory or residence townsite; strictly first class in every particular. Address Dr. C. S. Preston, 1007 Schalan Bldg, Houston, Texas.

WRITE HELLBERG & BLAIR, 418 Reberts-Banner Bildg., El Paso, Texas, for is formation about business opportunities of all kinds and investments in town lots is the new town of Columbus, situated in the wonderful Lower Mimbres Valley, New Medico, 74 miles west of El Paso, on the Paso & Southwestern R. R. Pure soft shallow water for irrigation. Free Government land. Fatented land at from \$15 to \$25 pt acre.

Classified Opportunities

\$0,000,000 IN THREE YEARS.—Invest in Washington real estate. As the nation gows so must its capital city develop. The increased value of Washington real estate in the past three years was approximately 50,000,000. Did a portion of this represent your profits? We are now placing on the market one of the best-located subdivisions in the choice northwest section, fronting one mile on Sixteenth street, and overlooking the National Rock Creek Fark. The future of this section will make this the best investment in the suburbs of the national capital. For plat and full information apply to Robert E. Heater, 411-412-413 Colorado Bulding, Washington, D. C.

CITY IN

SALE

lodern, up-w in opera-ding brick complete l'engine, wood, etc.;

roposition his time rs Record

PLANT

ER PLANT leal engine, generator: . 50 K. W. of two 90 ps. heaters, can be seen; Birming-ly use unity y use unity Title Guar-nam, Ala.

LANT

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dence townparticular,
nlan Bldg,

as, for intunities of wn lots in ted in the New Meron the Eles of the Eles of

FACTORY SITES, Business Property, Residences and Farms. If interested in the metropolis of the Southwest or its territory, write for free land list and bookiet on Houston, Texas (where if railroads meet the sea), or make your wants known. Bank references if desired. Central Land Co., 303 Theater Bidg., Houston, Texas.

MINERAL LAND FOR SALE

MINERAL LAND FOR SALE

WE ARE IN CONTROL, fee delivery (titles perfect), of large boundaries in Tensesse coal, iron and mineral belt. Surveys 2000 to 20,000 acres, convenient to transportation, having on it and near all the raw material needed for manufacturing purposes, good bituminous, domestic and coke-making coal; reins show large average tonnage per tre and casy mining cut, and abundance of high-grade iron ores. These valuable holdings can be delivered at comparatively low worth, to genuine buyers who can show worth, to genuine buyers who can show ratings or bank references to warrant the billity to promptly take over these lands. Sone but principals need reply. Open barjain to direct buyers. Address J. C. Lindser, Greensboro, N. C.

COAL LAND FOR SALE

FOR SALE—Coal lands in Kanawha, New Birer and Coal River fields, and business, residence and factory sites in Charleston, W. Ya. Address Robson & Nelson, Charles-ton, W. Va.

CUT-OVER TIMBER LANDS

4000 ACRES level rich cut-over timber land, 16 per acre. 14,750 acres cut-over timber bili land, 33.56 acre. Robert T. Sessions, Win-tirop, Aris.

CUT-OVER TIMBER TRACTS.

50,000 acres cut-over pine lands, Miss	\$6.50
30,000 acres cut-over pine lands, La	6.00
75,000 acres cut-over pine lands, Tex	5.00
18,000 acres cut-over hardwoods, La	4.50
Marsh Lands for Reclaimation.	
0,000 acres in a body, Gulf Coast of La.	3.00
Timber Lands.	
20.000 acres L. L. Y. pine, Fla., cut 3500 ft.	7.00
15,000 acres L. L. Y. pine, Ala., cut 7000 ft.	21.00
10,000 acres hardwood, cut 10,000 ft. (60%	
red gum)	10.00
Finest red gum proposition South.	
Wm. R. Taylor, 508 Perrin Bldg., New	Or-
leans, La.	
The state of the s	

CUT-OVER LANDS AND FARMS

CUT-OVER LANDS AND FARMS.	
1.400 acres, partly improved, Miss\$11.0	Æ
2200 acres, adjoins town on I. C. Ry 11.0	H
3,700 acres, plantation, La 12.5	Ä
6,000 acres, divided by N. O. & G. E. Ry. 7.0	Ю
17,400 acres, near city of 30,000 7.0	H)
1,520 acres, delta plantation 30.0	Ю
25,000 acres, improved farms in truck and	
berry section on I. C. Ry. Average. 15.0	H
Osyka Realty Co., Inc., Osyka, Miss.	

RED CEDAR WANTED

WANTED-To buy a large tract of recear. Mail sample of wood. James Colby, Galveston, Tex.

TIMBER LAND FOR SALE

ACRES-2900, of timber land; good soil; good timber, good climate; Shannon county, Missouri, within 1 mile of railroad station. This land is for sale. S. J. Dice, Stanberry, Mo.

TIMBER FOR SALE CHEAP IF SOLD AT ONCE.—7500 acres in Southern Virginia; %17 acres in North Carolina; both excellent propositions; near railronds. Inquire Box %, Winchester, Va.

80UTHERN TIMBER LANDS,—Large mets of pine, cypress and bardwood all ger the South. James & Colby, Galveston,

FARM AND TIMBER LANDS

GEORGIA FARM LAND FOR SALE.—I own in fee simple, titles perfect, 9781 acres of fertile farm land, lying along two trunk-line raliroads for seven miles and within 38 miles of Savannah, Georgia. On this land is a good stand of yellow pine, estimated to cut 200,000 feet, with thousands of cords of frewood, posts, ties and other small timber. Also good Sroom house, a barn that cannot be duplicated for \$1000, store building and other houses, with railroad station, stores and church on the property. Low transportation rates by reason of water competitive rates prevailing at Savannah, giving prompt shipping facilities to Northern markets for vegetables and fruit, with excellent market at home the year round. Healthy location, good water, and nothing better in Georgia as a colonization proposition. Will not divide tract, but with financially able parties will trade outright, or put in property and take interest in development of sme. For price and terms and further particals address W.W. Robertson, Norfolk, Va.

FOR SALE—Large and small plantations in the rich Red River Valley, cheap and on easy terms; also large tract of hardwood. Apply to E. J. Iles, Alexandria, Louisiana.

TIMBER, FARMING AND RICE LANDS for sale near Wilmington, N. C., on and near new railroad to Southport; new highways now building. Rare bargains for cash. Also an ideal dairy location near Wilmington. E. W. Taylor, Winnsboro, N. C.

I HAVE BARGAINS IN TIMBER TRACTS, large colonization propositions, cut-over lands and reclamation tracts in any size wanted up to 150,000 acres from \$2.50 per acre up. Wm. R. Taylor, Land and Timber Invest-ments, 508 Perrin Building, New Orleans, La. Established 1898. Sales over \$6,690,660.

GULF COAST LANDS.—We have large tracts for colonization in all sections from 5 an acre up. James & Colby, Galveston, 5 ex.

MISSISSIPPI LAND,—5000 acres, within 1½ miles of Hattlesburg; first-class corn and alfalfa land; cheapest colony tract in the South; ½5 per acre; half cash, J. W. Breen, 231 Title Guaranty Bldg., St. Louis, Mo.

30,000 ACRES of well-drained alluvial land in Point Coupee parish, La., one-half of which is good hardwood timber land; two rallronds cross the property; this is a very attractive colonization proposition; \$15 per acre. 69,000 acres of land in parishes of lberville and St. Martin; \$5 per acre if taken at once; an exceptional bargain. Write for particulars. E. L. Page, 618 Whitney-Central Bidg., New Orleans, La.

HOME AND FARM DEVELOPMENT LANDS,—27,000 acres of land in North Carolina, well adapted to colonization purposes or to development as a farming proposition. Lies on both sides of the S. A. L. ky. Contains large area of famous Hoffman sandy loam type of soil, which readily responds to intensive methods of cultivation and returns enormous yields of cotton, corn and truck. 98 per cent. can be brought into cultivation. Fine water and healthful climate. Address W. P. McRae, Rockingham, N. C., or P. C. Whitlock, Charlotte, N. C.

TRACT FOR COLONIZATION. - 12,000 acres in Lavaca and Jackson counties, Texas: 95 per cent. tillable: black waxy and black sandy land. On both sides of Lavaca River. Numerous settlements and good wells of water on tract; all subdivided and ready for colonizing. Will give good terms on this tract. Emil Locke, No. 712-13 Gibbs Bldg. San Antonlo, Tex.

FARM, FRUIT AND TRUCK LANDS

715-ACRE Alabama plantation; 250 acres in cultivation; bal. timber; mod. residence; 6 tenant-houses; price \$15,000; would take smaller farm as part payment. George Mc-Masters, Iuka, Miss.

ARKANSAS

FOR SALE—611 acres near Little Rock, just east of Rose City Oil Mill; about 310 acres in cultivation, a bale of cotton per acre growing on it. Two railroads and two pike roads running through it; for farm or truck gardens, finest location and land on market. It is near enough for factory sites, Here is a fortune for the wise investor. Price \$100 per acre; \$15,000 cash; balance annually to suit, with interest at 7 per cent. A. J. Hunter, Little Rock, Ark.

WE ARE OFFERING some of the best cotton plantations in Arkansas at \$50 an acre. Polk Real Estate Co., Little Rock, Ark.

FLORIDA

FLORIDA FRUIT AND TRUCK LANDS.—
We offer 16-acre tracts in that part of the State of Florida lying in Hillsboro county and Lake Butler region, in the Pinellas peninsula, on the west coast of Florida, on the Gulf of Mexico; with its elevation and rolling hills is especially suited for fruits of all kinds—grapefruit, oranges, grapes, dates, figs. bananas, peaches and other fruits, as well as vegetables, potatoes, corn, beans, peanuts and all the varieties that can be produced anywhere. The Tarpon Springs district offers the most favorable conditions for farmer, home seeker and investor. Fertile lands in small tracts, easy monthly particularly in the most desirable part of Florida, write now for particulars and reservation. Tampa & Tarpon Springs Land Co., Tampa, Florida.

FOR SALE BY OWNER—4000 acres of fine land in Orange county, Florida, in tracts to suit purchasers; nothing better in the State; adapted to general farming, trucking and citrus fruits; fine flowing wells; rich land; healthy location; two rallroads; churches, schools and good neighbors. Prices and terms on application to C. C. Brown, Orlando, Fla.

WHY PALMETTO LEADS.—The 800,000 boxes of fruits and early vegetables attests the superiority of soil, climate and irrigation necessary to produce such crops. The ease with which such crops are handled by rail and water make it an ideal place for fruit and vegetable growing. The Manatee River, Terra Cina and Tampa bays furnish ideal salt-water fishing, boating and bathing. For further information address The Manatee River Board of Trade, Palmetto, Florids.

GEORGIA

GEORGIA

2990 acres extra fine productive land in Sumter county, Georgia, 3 miles from railroad station; extra well improved in everyway; 1500 acres in high state of cultivation; most of the lands level; a large per cent. of this land producing a bale of cotton per acre; 30 extra good mules, 20 head of cattle, about 40 head of hogs, all farming implements and feed stuff raised on the place this year. Price \$85,000; good terms.

735 acres extra fine hand, red and gray land with clay subsoil, lying well, 4 miles from Americus, Georgia; 500 acres in cultivation; on good rond. Price \$40 per acre; easy terms.

166 acres, 10 miles from Americus, Georgia, ince productive lands with clay subsoil; two good seven-room dwellings; three tenant-bouses; in good community. Price \$300.

We have 150 farms of various kinds and sizes for sale. Will finance any purchase made through us. Southern Land Company of Americus, Georgia.

MEXICO

MEXICO

20,000 ACRES in the State of Conhulla, Mexico, in the famous Laguna District. This land will produce anything that grows in the temperate zone, especially cotton. There is an abundance of never-failing water, one spring now irrigating 250 acres. Soil is sandy loam. The principal feature of this tract is the entire absence of gravel near the foothills. The high lands of the tract afford the finest pasturage, and the abundance of springs makes it unnecessary to pump water for stock. One big ranch-house and fourteen clouses for laborers, 250 head cattle, 6 mules, 2 wagons, hack and harness to match. Titles perfect and guaranteed. This can be bought for \$1.25 an acre. Henry Cass & Fry, 30 City National Bank, El Paso, Tex.

230,000 ACRES, Coahuila, Mexico; water plenty; good pasture; soil rich; produces corn, wheat, cotton, variety of fruits; per acre, 79c. Advertise bargains only. A. L. Hodge, Dallas, Tex.

MISSISSIPPI

MISSISPPI

3555 ACRES of good hill cotton land for sale; now in successful operation; well supplied with negro labor. The plantation lies between two branches of the Illinois Central Raliroad; nearest shipping point, four miles from the dwelling. The land corners within half mile of the raliroad. A sufficiency of cabins for tenants, stables, cribs, cotton pens and all outhouses. Forty-five head of mules and horses, cows, farming implements and feedstuff. Price very low. Terms good. Address A. C. Leigh, Grenada, Miss., bonadide owner of the property.

NORTH CAROLINA

NORTH CAROLINA
NORTH CAROLINA FARMS FOR SALE.
132 acres, 5 miles north of Raleigh; three four-room houses, one celled throughout, others partially: 80 acres in cultivation; plenty wood, some good timber; good spring and well water; beautiful oak and hickory grove, one mile from S. A.L. R. station; fish and bathling pond of pure water. Price \$5500.
260 acres, 10 miles north of Raleigh; nine-room dwelling, nearly new; good outbuildings, mill, cotton glu; seven comfortable tennat-houses; two-acre pond stocked with fish; plenty wood and good water. Price \$10,000. J. H. Fleming & Som, Raleigh, N. C.

FARM FOR PROFIT in Eastern North Carolina, the "Nation's Garden Spot." Leads other localities for vegetables, fruits and staple farming on small capital. Homeseek-ers and investors, write Carolina Trucking Development Co., 815 Southern Bldg., Wil-mington, N. C.

PECOS PALISADES LANDS.—Ranch aud irrigated lands in lower Pecos Valley. S. L. Estes. 405 North Texas Building, Dallas, Texas.

JAS. GOODE REAL ESTATE CO., ranch and irrigated lands. Office, Orient Hotel, Pecos, Tex.

IRRIGATED FARM. — 350 acres of rich sandy loam, level, and to be irrigated from the ramous Elephant Butte Dam, now in course of construction. This land can now be bought for \$55 an acre. Write us for full description. Loomis Bros., El Paso, Texas, Mexican Timber Lands.

IRRIGATED LANDS.—Parties in the North. East and Middle West interested in improved and unimproved irrigated lands and ranch property in the great Pecos section, communicate with us. Pawkett & Davis, Pecos, Tex.

TEXAS LAND FOR SALE.—If you want black land farms or colonization proposition, write me now. Remember, I pay your rail-road fare if you buy from me. J. H. Russell, Abilene, Taylor county, Texas.

155 ACRES in Eastland county, Texas, on T. & P. R. R.: 75 acres in cultivation; fine pecan orchard; running water in creek; one mile of settlement; improvements are old: the grass for grazing. This is good land for farming purposes and very cheap at \$25 per acre. Louis C. Wise & Son, Abilene, Texas.

TEXAS LANDS.—Large tracts of the cele rated Gulf Coast fruit and truck land there crops grow and flowers bloom every nonth in the year. James & Colby, Galves

TEXAS COTTON AND SUGAR PLANTA TION. - 2000-acre plantation or Calvin TEXAS COTTON AND SUGAR PLANTA-TION.—2000-acre plantation on Colorado river, near Eagle lake; railroad switch on property; about 1000 acres river-bottom land in cultivation; 18 houses, barns, cribs and cotton gin, grist mill, blacksmith shop and many other improvements; 200 head stock; about 49 horses and mules; planted this year in cotton and corn; fluest pecan grove in South Texas on property. Alfogether is finest and cheapest thing in State. Every-thing goes for \$25 per acre; easy terms. Kullenberg Realty Co., 302 Gibbs Bidg., San Antonio, Texas.

10.000-ACRE RANCH.—Large per cent. agricultural land; the grass; fairly well improved; well watered; located in Southwest Texas, where the climate, health, fishing and hunting is unsurpassed. Price \$7.50 per acre; good terms. Walton & McCauley, 105½ South 4th St., Waco, Texas.

SOUTH TENAS ORANGE, FIG. POTATO, CORN AND COTTON LAND.—We offer 254 acres of the best improved potato, corn and cotton land in South Texas, near Houston, for \$30 per acre. Will sell for \$300 per acre inside of five years. This land will pay a big dividend on that price now.

1700 acres, all prairie, orange, fig and garden land, perfect drainage, between Houston and Galveston. Will sell as a whole or in 10-acre tracts, or as much as you can handle, on very easy terms. Send for our literature and let us know what size tract of land you wish to buy. L. Bryan & Co., Houston, Tex.

SAN BENITO, TEXAS, IRRIGATED LANDS.—10 acres or more, close to shipping stations of the Interurban Railroad; big canal through every tract. Ask for booklet. Engle Bros., 412 Gibbs Bidg., San Antonio, Tex.

YOU SHOULD JOIN US in owning a Texas Bermuda onion farm. We are developing 500 acres of the best onion land in Texas. 3 acres of our land made \$1800 profit. Co-operation with us means wealth. You cannot lose. All land irrigated from artesian wells. No water troubles. One hundred acres in each farm. 100 shares per farm. \$150 per share, monthly payments of \$5 per acre. Let us send you particulars. Zavala Onion Farms Company, Gibbs Bullding, San Antonio, Texas.

THE FRIO VALLEY WINTER GARDENS. LIBS FIGIO VALLEY WINTER GARDENS, La Salle county, Southwest Texas, a colony of 100,000 acres level rich black sandy loam in famous artesian belt; grow oranges, figs, Bermuda onlons. We are opening Fowlerton, a new town on new railroad in heart of the colony. Guaranteed improvements on townsite. A 10-acre farm and free residence lot neems of \$15 cash; balance \$10 monthly. Write for booklet A, prices, plats, etc. Fowler Brothers Land Co., Frost Building, San Antonio, Texas.

FOR SALE—Greatest bargain in celebrated frazos Valley: 2100-acre plantation, pro-tucing a bale of cotton per acre this year; 1890 acres in good state of cultivation; rich liuvial soil; good water; 30 tenant-houses illed with good tenants: railroad station on lantation. Price \$42.50 per acre. Write Burnham Realty Co., Waco, Tex.

COTTON AND CORN LAND.—12,500 acres, near two good railroads, being one mile from the and two miles from the other; splendid colonization tract: at \$10 per acre; one-tourth cnah; balance 6 per cent. Address wwere, Dr. C. S. Preston, 1007 Scanian Bidg., Iouston, Texas.

GREATER HOUSTON (Population over 100,000).—Just twelve miles out on Main street (Houston's \$200,000,000 thoroughfare) is located North Houston Gardens; 10-acre tracts only \$800; terms, \$25 cash, balance \$15 per month, no interest; five-acre tracts, \$460; terms \$15 cash, balance \$7.50 per month, no interest; 142-acre improved farm 50 miles from Houston, price \$25 per acre. 11. S. Taylor, Scanlan Bidg., Houston, Texas, Member Houston Real Estate Exchange and the Texas Realty Association.

for farmer, home seeker and investor. Fertile lands in small tracts, easy monthly payments; guaranteed title. Investigation in vited. If you want a bargain and a home in the most destrable part of Florida, write now for particulars and reservation. Tampa & Tarpon Springs Land Co., Tampa, Florida.

FLORIDA FARMS ARE FORTUNES.—Our soil similar to fertile sections Iowa, Missouri; easy-payment plan. Write for booklet. Milton Land & Investment Co., Marianna, Fla.

Opportunities Classified

[CONTINUED FROM PAGES 76 AND 77.]

FRUIT. FARM AND TRUCK LANDS-TEXAS

88 ACRES black sandy loam; 75 acres in cultivation, on good road. Price \$75.00 per acre; casy terms. Crosslin Realty Company, Waco, Texas.

VIRGINIA AND MARYLAND

VIRGINIA AND MARYLAND

FOR SALE—One of the finest Albemarle pippin orchards that can be bought; nearly 4000 frees, about two-thirds pippin, remainder winesaps, 12 to 20 years old; this year's crop estimated about 2500 barrels; sufficient quantity right soil, porters clay and loam to double size. This will insure handsome permanent income for life, no matter how young you are. If interested, you must act at once, as it has just been placed on the market. Price \$40,000; terms, \$1500 cash; remainder onc, two and three years. McClure-Davenport Taylor Company, Richmond, Va.

VIRGINIA AND MARYLAND high-class water-front property on the famous Eastern Shore of Maryland, also on the Chesapeake Bay in Virginia, and farms in all the Piedmont section; many bearing commercial apple orchards in the mountains of Virginia. Send for Catalogue S. Southern Farm Agency, 721 Main St., Lynchburg, Va.

FARMS—VIRGINIA AND MARYLAND.— Superb colonial estates; tidewater proper-ties; agencies at all important points. Ash-bridge Realty Co., Washington, D. C.

FOUNDRY WORK TO LET

FOUNDRY WORK TO LET.—Advertiser has profitable work for foundry and machine show. Address, for full particulars, No. 842, care Manufacturers Record.

STREET CAR FOR SALE

FOR SALE—One \$5000 No. 19 Fairbanks-Morse gasoline street car, with especially constructed body; far superior to regular style; standard gauge; perfect condition. Laurel Park Street Railroad Co., Henderson-ville, North Carolina.

MACHINERY AND SUPPLIES

WANTED—Every consumer in the Southwest to know that the Texas Rolling Mill Company of Fort Worth, Texas, manufactures track spikes, track bolts, machine bolts and nuts; also standard sizes of bar iron. One hundred tons always in stock. Prompt shipments our specialty. Satisfaction guaranteed.

FINANCIAL

SAVANNAH, GA.—Real estate loans paying 6 per cent. to 7 per cent. to the investor; absolutely safe. Beautiful sites for winter homes at Vernon View, the sait-water place near Savannah on the Grand Prize Course; dieal winter climate. G. A. Mercer, Law and Real Estate, Savannah, Ga. References; Any bank or trust company in Savannah.

PROFESSIONAL

ARE YOU POSTED on twentieth-century patent searching? The engineer service separate from law practice? Read No. 2-B, Inventor's Pocket Library, free for stamp. Engineer Searching Co., Fleming Bidg.. Washington, D. C.

PATENT ATTORNEYS

EUGENE C. BROWN, ENGINEER and Patent Lawyer, Suite 40 Victor Bidg., Washington, D. C., Member Bar U. S. Supreme Court. Patents and Trademarks; Patent Suits for Infringement. Mr. Brown is especially qualified to prosecute cases in Patent Office and patent litigation from both Engineering and Legal standpoints, having been Examiner in U. S. Patent Office for nine years. Send sketch for advice.

PATENTS OF QUALITY.—The valuable and salable kind. Send for free advisory in-ormation. Reference to clients throughout he U. S. Geo. R. Hamlin, Patent Lawyer, nventive Age Bldg., Washington, D. C.

IDEAS WANTED.—Manufacturers are writing for patents procured through me. Send for free 72-page guide and "Stepping Stones" (containing over 200 inventions wanted). Personal services. Clients' patents sold free. Trade-marks registered. R. B. Owen, Dept. 2. Washington, D. C.

PATENT YOUR IDEAS.—\$100,000 offered for one invention, \$8500 for another; book, "How to Obtain a Patent" and "What to Invent," sent free; send rough sketch for free report as to patentability; patent obtained or fee returned. We advertise your patent for sale at our expense. Chandlee & Chandlee, patent attorneys, \$78 F street, Washington, D. C.

PATENTS Secured or Fee Returned. Send sketch for free report as to patentability. Guide book and what to invent, with valuable list of inventions wanted, sent free; \$1.000,000 offered for one invention; \$16,000 for others. Patents secured by us advertised free in World's Progress; sample free. Victor J. Evans & Co., Washington, D. C.

PATENT WHAT YOU INVENT.—Your ideas may bring you a fortune. Our free books tell what to invent and how to obtain a patent. Send sketch of invention for free opinion as to patentability. Patents obtained or fee returned. Patents advertised for sale free. H. Ellis Chandlee & Co., successors to Woodward & Chandlee, Suite 75 Bornot Bidg, Washington, D. C.

PATENTS FOR SALE

WE HAVE recently secured the foll patents. Address all communication Sales Dept., Victor J. Evans & Co., Waton, D. C.: Richard G. Dowins, meter ter compensating for pressure varian Arthur H. Ehlert, blind; Philip Weber guide; Edward Olson, grain shocker; Lindsay, engine; Jesse Lines, seed in scaling machine; John P. Shafer, per pencil holder; James N. Randle and Goodchild, scissors or shears; C. B. Isroach or belt-pin keeper; Anthony M. train pipe coupling; James R. Tackert, press; C. B. Keeran, scaling device; Brackins, wanshoard; Feter B. Barnes ton-gin being coupling; James Resel, grate; ton L. Coates, milk-can cover; Win, B. 6 bell, shoe-polishing machine; H. B. (hat retainer; J. E. Emley, toolholder; Zimmerman, glazier's tool; C. W. S. Silde-valve adjuster; Winfield S. Rob axe; W. S. Minor, railway roadled; Y. Chambers, compound; T. H. Ethe ever-level table.

FOR SALE-U. S. Patent No. 918.68, dated 1910; hitching device for stock; also Canada patent; will sell outright for part cash and real estate; plenty of territory, Eleser Klemetson, Henning, Minn.

PUBLIC BUILDINGS,

MISCELLANEOUS

GOVERNMENT PROPOSALS

PROPOSALS FOR PLANT AND MATERIALS for Hydro-electric Station at Gatum, methoding Water Turbines, Governors, Head Gates, Penstocks, Compressed-air Regulators, Electric Generators, Exciters, Exciter Sets, Electric Generators, Exciters, Exciter Sets, Eubricating System, Traveling Cranes, etc. Scaled proposals will be received at the office of the General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 19,30 A. M. October 9, 1911, at which time they will be opened in public, for furnishing the above-mentifoned articles. Blanks and general information relating to this Circular (No. 648 may be obtained from this office or the offices of the Assistant Purchasing Agents, 21 State Street, New York City; 614 Whitney-Central Building, New Orleans, La, and 1986 North Point Street, San Francisco, Cal.; asa from the U. S. Engineer Offices in the following cities; Scattle, Wash,; Los Angeles, Cal.; Baltimore, Md.; Philadelphia, Pa.; Pittsburgh, Pa.; Boston, Mass., Buffalo, N. Y.; Cleveland, Ohio; Cincinnati, Ohio; Chicago, Ili.; 81, Louis, Mo.; Detroit, Mich.; Miwanke, Wis.; 81, Paul, Minn.; Chattanoega, Tenn.; Louisville, Ky.; Mobile, Ala, and Galveston, Tex.; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, H., and Chamber of Commerce and Board of Trade, Theoma, Wash, F. C. RogGS, Major, Corps of Engineers, U. S. A., General Purchasing Officer. PROPOSALS FOR PLANT AND MATE-rials for Hydro-electric Station at Gatun, including Water Turbines, Governors, Head

chasing officer.

Treasury dependence.

Treasury dependence.

September 2, 1911. Sealed proposals will be received in this office until 3 o'clock P. M. on the 16th day of October, 1911, and then opened, for the construction, complete (including plumbing, gasplping, heating apparatus, electric conduits and wiring and lighting fixtures), of the United States Postoffice at Point Pleasant, W. Va. The building is to be two stories in height with a ground area of 5509 sq. ft., of fireproof construction, with brick facing and stone trim. Drawings and specifications may be obtained from the custodian of site at Point Pleasant, W. Va., or at this office, at the discretion of the Supervising Architect.

James KNOX TAYLOR, Supervising Architect.

SEALED PROPOSALS, endorsed "Proposals for Renewal of 40-ton Locomotive Crane Track," will be received at the Bureau of Yards and Docks, Navy Department, Washington, until 11 o'clock A. M. September 30, 1911, and then and there publicly opened, for renewal of 40-ton locomotive crane track at the Navy-yard, Norfolk, Va. Plans and specifications can be obtained on application to the Bureau or to the Commandant of the Navy-yard named. WM, M. SMITH, Acting Chief of Bureau, August 28, 1911.

PROPOSALS will be received at the Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 o'clock A. M. September 19, 1911, and publicly opened immediately thereafter, for the erection of six cottages at the Naval Experiment Station, Annapolis, Md. Applications for proposals should refer to Schedule 2889. Blank proposals will be furnished upon application to the Navy Pay Office, Baltimore, Md., or to the Bureau, T. J. COWIE, Paymaster-General, U. S. N. 9-5-II,

NEW BOND OFFERINGS

Road Bonds

Tulsa, Okla., September 8, 1911.

Bids will be received by Board of County
Commissioners of Tulsa County, Okla., for
proposed issue of \$500,000 bonds of proposed
Road District No. 1, Tulsa County, Okla.
Bonds to run 25 years and bear 5 per cent,
interest.

Hones to run 25 years and bear 5 per cent, interest.

Bids must be accompanied by a certified check for \$5000 on a local bank. Bids to be in hands of County Clerk by L39 P. M. September 25, 1911.

Board reserves the right to reject any and all bids. Checks returned unsuccessful bidders.

By order of County Commissioners.
R. E. CURRAN,
County Clerk

Road Improvement Bonds

Bids will be received by the Commissioners' Court of Leon County, Texas, until 12 o'clock noon October 1, 1911, for \$15.000 bonds of Road District No. 1 of Leon county, Texas: also for \$39,000 bonds of Road District No. 2 of Leon county, Texas: also for \$39,000 bonds of Road District No. 3 of Leon county, Texas; also for \$30,000 bonds of Road District No. 4 of Leon county, Texas; also for \$11,000 bonds of Road District No. 5 of Road District No. 6 of Leon county, Texas, also for \$10,000 bonds of Road District No. 5 of Road District No. 6 of Leon county, Texas, and for \$50,000 of bonds of Road District No. 7 of Leon county, Texas, All of sald bonds bear 5 per cent. Interest and all mature in forty years (except District No. 7, which mature in thirty years), with option of redemption at any time after five years.

Address inquiries and bids to W. D. Lacey, County, Judge Centeryille, Texas.

five years.
Address inquiries and bids to W. D. Lacey,
County Judge, Centerville, Texas.
W. D. LACEY, County Judge.

Sale of Bonds

U. S. ENGINEER OFFICE, 920 17th Street, N. W., Washington, D. C., August 23, 1911. Sealed proposals for dredging in James River, Virginia, will be received at this office until 12 M. September 22, 1911, and then publicly opened. Information on application at U. S. Enginedy Office, 28 N. 9th Street, Richmond, Va. W. C. LANGFITT, Lieut. Col., Engrs.

U. S. ENGINEER OFFICE, 920 17th St. 1911. Sealed proposals for dredging in Upper Machodoc Creek, Va., will be received here until 12 M. September 27, 1911, and then publicly opened. Information on application. W. C. LANGFITT, Lieut.-Col., Engrs.

Bonds For Sale

For sale by Town of Dillon, Dillon, S. C., Water-works Bonds in the sum of \$39,000, Sewerage Bonds in the sum of \$38,000. To run 40 years, with option to redeem at expiration of 20 years. Interest not to exceed 5 per cent, per annum. Bids will be received until October 1, 1911. Address

E. R. HAMER.

Fifty Thousand Dollars (\$50-000.00) Street and School **Bonds**

Sealed bids will be received by the Board of Mayor and Aldermen of the City of Bay St. Louis, Miss., until the 2d day of October, 1911, for the purchase of \$50,000 (fifty thousand dollars) street-improvement bonds in the denomination of \$100 (one hundred dollars) each, with interest at 5 per cent, per annum, payable semi-annually on the 1st day of April and the 2d of October of each year, for the purpose of improving the streets of the City of Bay St. Louis, to protect same from overflow, caving banks and other like dangers, and for the purpose of purchasing a lot and erecting an additional school building thereon.

The said bonds shall mature 20 years after date, but the city reserves the right to cancel the whole or any part of said bonds at any time after the expiration of five years after the date of issue.

The city reserves the right to accept or reject any or all bids.

By order of the Board of Mayor and Aldermen.

R. W. TOULME, Mayor.

R. W. TOULME, Mayor. Attest: H. HOOD BEYER, Secy.

Bonds For Sale

Pensacola, Fla.

Notice is hereby given by the County Commissioners of Escambla County, Florida, that they will receive sealed bids for the purchase of \$180,000 of 4½ per cent. coupon bonds of Escambia County, Florida, for the whole or part of said bonds, at the office of the Clerk of Circuit Court of Escambia County, Florida, on Tuesday, the 19th day of September, 1911, at 10 A. M. The amount of bonds hereby offered to be soid are \$180,000 of bonds to be issued by Escambia County, Florida, and bear interest at the rate of 4½ per cent. per annum. The said bonds are in denomination of \$500 each and numbered consecutively by commencing with number 1. The interest on said bonds is at the rate of 4½ per cent. per annum, payable on October 1 annually. The said bonds provide that twelve of said bonds shall, at the option of the bond trustees, be retired on the 1st day of October of each year, commencing October 1, 1912, in the order in which they will be numbered.

Certified check for 2½ per cent. of amount of bid to accompany each bid.

The County Conmissioners hereby reserve the right to reject and all bids offered upon the said bond.

Clerk Board County Commissioners.

JAS. MACGIBBON. Clerk Board County Commissioners.

Sale of Bonds

Sale of Bonds

Notice is hereby given that sealed bids will be received by Wiley C. Rodman, Washington, N. C., attorney for the Board of Commissioners for the County of Beautort, or by G. Rumley, Clerk to said Board, up to 12 o'clock neon on Monday, the 2d day of October, 1911, for an Issue of bends for said county in the sum of thirty-five thousand deliars, payable fifty years after date, interest at the rate of 5 per cent, per annum from date of issue, payable semi-annually.

Any questions as to the validity of said bond issue will be submitted to the Supreme Court at the expense of the county.

The purchaser must refund accrued interest on bonds to date of payment for same.

The county reserves the right to reject any and all bids. A cash deposit of 5 per cent. must accompany each bid.

Full information with regard to the tax valuation and indebtedness of the county will be furnished upon application to the undersigned.

WILEY C. RODMAN, County Attorney,

WILEY C. RODMAN, County Attorney,

Or G. RUMLEY, Clerk Board of Commissioners, Washington, N. C.

\$250,000 4% School Improvement Bonds

ment Bonds

Sealed bids will be received by the City of Dallas, Tex., until 12 o'clock noon. Monday, October 2, 1911, for the issue of Two Hundred and Fifty Thousand Dollars (\$250,001) four per cent. (\$7\) Permanent School Improvement Bonds, bearing date of July 1, 1911. Principal and interest payable at the Chase National Dank, in New York City. Interest payable semi-annually. Bonds mature serially one to forty years, beginning July 1, 1912; \$6000 each year, with \$8000 each tent year, until 1951, when \$10,000 will mature. Each bid for the above bonds must be accompanied by a certified check payable to W. T. Henderson, Commissioner of Finance and Revenue, for two per cent. (2%) of the face value of the bonds bid for. Money to be paid and bonds to be delivered at Dallas. Texas.

The bonds are in denominations of \$1000 each.

The City of Dallas reserves the right to reject any and all bids.

City Secretary, City of Dallas, Tex.

Materials and Equipment for Nocona (Texas) Water-Works System

System

Sealed bids, addressed to Walter Hodges, Mayor, for furnishing water-works material and equipment, will be received by the City Council of Nocona, Texas, up to the hour of 8 o'clock P. M. October 2, 1911, and opened immediately thereafter. Approximate quantities: One 500-gallon-per-minute rotary pump, one 100-gallon-per-minute deep-well pump, one 20-horse-power gasoline engine, one 75,000-gallon steel tank and tower, 190 feet over all; 120 tons of 4, 6 and 8 inch eastiron pipe; also valves and hydrants. The right to accept or reject any or all bids is reserved by the City Council. Specifications will be mailed on request by The Founda Shaw Engineering Company, 308 Andrews Edg., Dallas, Texas, or Walter Hodges, Mayor, Nocona, Texas.

PROPOSALS

PUBLIC BUILDINGS

MISCELLANEOUS

NEW BOND OFFERINGS

\$70,000 Water and Light Bonds

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Hodges, material the City hour of d opened te quan-rotary

The City Council of the City of Dothan offers \$70.000 of 5 per cent. Gold Coupon Bonds, dated (tetober 1, 1911, in denominations of \$1000 etch, to be due and payable twenty years from date of their basue, interest payable sont-annually at the Hanover National Bank in the city of New York. Issued to erect a Water and Light Plant in said city of Dothan. Bids to be opened Ortober 2, 1911, a light o'clock P. M. Each bidder is required to deposit a certified check of \$1000. The city of Dothan reserving the right to reject any and all bids.

R. W. LISENBY.

R. W. LISENBY,

Five Hundred Thousand Dollars (\$500,000) Public School Building Bonds of the City of Houston, Texas.

Houston, Iexas.

Notice to Bond Buyers.

Sealed bids will be received by the city of Houston, Texas, until 12 o'clock noon Monday, September 25, 1911, for the issue of five hundred thousand dollars (\$500,060) four and one-half per cent. (4½%) public school building bonds, learing date the 26th day of June, A. D. 1911. Interest payable semi-annually at the office of the Union Trust Company in the city of New York. Sald bonds to run thirty (30) years, with an option reserved by the city of Houston to pay same at the expiration of twenty (20) years.

Each bid for the above issue of bonds must be accompanied by a certified check on a Houston bank, payable to H. B. Rice, Mayor, for one per cent. (1%) of the face value of said issue, as a guaranty of good faith; londs to be delivered and money paid in Houston, Texas.

Seal. Mayor of the Clty Secretary.

Attest, DAN C, SMITH, JR.,
City Secretary.

WATERWORKS AND SEWERS

Sewers and Water Mains

Bids are requested by September 27, 1911, or constructing 1500 feet 16-inch, 4800 feet linch and 2000 feet 6-inch sewer lines; relay-ing 140 feet 4-inch C. I. pipe with 8-inch and aying 2000 feet 4-inch C. I. water mains, NEWNAN WATER AND LIGHT COMMISSION, W. B. Pringle, Seey., Newnan, Ga.

Sewers and Water Mains

Village of Summerville,
Augusta, Ga., September 7, 1911.
Scaled proposals for building sewers and alying water mains in the Village of Summerville, Augusta, Georgia, will be received by the Village Council, at the office of the Town Clerk, until 12 M. September 30, 1911, and at that time publicly opened and read. The work includes about—
150 lin. ft. 24" T. C. Pipe Sewers,
150 lin. ft. 15" T. C. Pipe Sewers,
150 lin. ft. 16" T. C. Pipe Sewers,
150 lin. ft. 6" T. L. Pipe Water Mains,
19 Lampholes,
21 Mambods,
32 Ein. Ritochemic (Incomm)

2) Mannioles,
9 Lampholes,
12 Fire Hydranis (two-way),
Each bid must be accompanied by a check
for one hundred (\$100) dollars.
Plans and specifications may be seen at the
Village Hall or at the office of the Engineer,
32 Dyer Building, Augusta, Ga.
The Council reserves the right to reject
any and all bids.
A. CUTHBERT, Intendant.

A. CUTHBERT, Intendant, GEO, W. SUMMERS, Engineer.

MISCELLANEOUS

Proposals for Street improvements

BURLINGTON, N. C.

BURLINGTON, N. C.

Sealed proposals will be received by the Street and Sidewalk Committee of the City of Burlington, N. C., until 3 P. M. September 28, 1911, for improving streets. The work will consist of about 20,000 square yards bituminous macadam (penetration method), 15,900 square yards of concrete sidewalks, 5000 lineal feet combined concrete curb and gutter, and 25,000 cubic yards of grading.

Plans, profiles, specifications, etc., will be suffle at the Mayor's office in Burlington, N. C., and at the Engineer's office in Charlotte, N. C., and copies of the specifications, form of proposal, etc., may be obtained from the Engineer after September 16.

No bid will be considered unless accompanied by a certified check for \$500 as an evidence of good faith.

The right is reserved to reject any or all bids.

ence of good faith.

The right is reserved to reject any or all

J. H. FREELAND, Mayor.

Engineer: GILBERT C. WHITE, Charlotte, N. C.

Dirt Excavation

The contract will be let October 10, 1911, for the excavation of about 250,000 yards of dirt in the Piney drainage ditch in Monroe and Lee counties, Arkansas, near Brinkley.

If you want to figure on the job, address, for specifications and terms, J. A. Sane, Sec. Board, Brinkley, Ark.

Bids for Street Lighting. Charleston, S. C.

FROM JUNE 39, 1912, FOR A TERM OF ONE, TWO OR FOUR YEARS.

FROM JUNE 39, 1912, FOR A TERM OF ONE, TWO OR FOUR YEARS.

Sealed proposals will be received at the office of the City Electrician of Charleston, 8, C., until 12 o'clock noon on October 18, 1911, for lighting the streets of the city of Charleston, S. C., for a term of one, two or four years with electricity, gas or some other illuminating power equivalent thereto, or partly by one and partly by another.

The estimate requirements are three hundred (390) are lights of the inclose type, to be supplied with an alternating current of not less than 64 amperes under a pressure of not less than seventy (70) volts and the electrical energy of each lamp 45 watts with an illuminating capacity of 1290 (normal) candle power.

Gas lamps to be of the mantle type, 60 (normal) candle power, and gas to be delivered at a pressure of not less than one and one-half nor more than four inches, and to be of standard commercial quality.

Detail specifications of lighting will be furnished all bidders upon application to the City Electrician.

Lights under this contract to be ready for operation on June 39, 1912.

Certified check for \$550 to accompany each bid, and every bidder must be prepared to furnish a bond satisfactory to the Mayor to the penal amount of \$25,000 conditioned for the performance of his part of the contract, provided his bid is accepted. The city reserves the right to reject any and all bids.

ION SIMONS, City Electrician, Charleston, S. C.

Approved:
R. M. MASTERS, Chairman,
Committee on Lighting the City.

Courthouse Furniture

Tulsa, Okla.

Senled bids will be received by Board of ounty Commissioners of Tulsa County, klahoma, for furniture and fixtures for ew courthouse, All bids to be in by 9 'clock A. M. Wednesday, October 4, 1911.

Samples to be inspected on said date, ourd reserves the right to reject any and I bids.

Plans and Associated.

Board reserves the all bids.
Plans and description to be obtained from Winkler & Macdonald, architects.
By order of the County Commissioners.
By R. E. CURRAN,
County Clerk.

Courthouse Light Fixtures

Tulsa, Oklai.

Scaled bids will be received by Board of County Commissioners of Tulsa County, Oklahoma, for light fixtures for new county courthouse. All bids to be in at 5 o'clock P. M. Tucsday, October 3; 1811, 5.

Samples to be inspected on October 4, 1911. Board reserves the right to refect any and all bids.

Board reserves the risks I bids. Plans and descriptions to be obtained from Yinkler & Macdonald, Architects. By order of the County Commissioners, By R. E. CURRAN, County Clerk.

Sewage Disposal Plants

CHANGE OF DATE.

Rock Hill, 8. C., August 28, 1911.

Sealed proposals for furnishing all labor and materials for constructing three sewage-disposal plants near the city of Rock Hill, 8. C., will be received by the Sewerage Commission until noon September 25, 1911, in accordance with plans on file in the office of Engineer for Commission, Rock Hill, 8. C., and in office of Hering & Gregory, 170 Broadway, New York. Work includes construction of three Imhoff tanks, two sprinkling filters 70'x158', one contact bed 76'x150', three sludge beds, dosing tanks, etc.

Plans can be obtained on deposit of \$25 from the Engineer for Commission.

Each bld must be accompanied by certified check for \$1000, guaranteeing good faith, etc.

The right is reserved to reject any or all bids.

from Eac check The bids.

SEWERAGE COMMISSION.
J. B. JOHNSON, Chairman.
THOS. W. COTHRAN,
Engineer for Commission.

SALE OF VALUABLE LIGHT AND WATER PLANT

The undersigned receiver will, pursuant to a decree of the Circuit Court of the United States for the Southern District of West Virginia, rendered on the 16th day of June, 1911, in the case of T. H. Given, H. S. A. Stuart and E. M. Herr, Receivers of the Westinghouse Electric & Manufacturing Company, against the Marlinton Light & Water Company and others, sell at public auction to the highest bidder, on Tuesday, the 3d day of October, 1911, at the front door of the Courthouse, Pocahontas county, all the property, rights, privileges and franchises of every kind and character of the said Marlinton Light & Water Company.

The description is about as follows:

Marlinton is the county seat of Pocahontas county, West Virginia, 2300 feet above sea level, healthy, good school and churches

Marlinton is a growing town on the Greenbrier Division of the C. & O. Railway.

The Marlinton Light & Water Company has town franchise and town contract for light and water. The town now pays for light and water \$2200 per year. Marlinton has now about 2000 inhabitants.

The Marlinton Light & Water Company has two drilled wells, cased down 110 feet; wells give abundance of pure water.

Two Worthington compound pumps, two steel tanks of 50,000 gallons each, water mains of cast-iron with necessary cut-off valves, 28 Ludlow fire hydrants, etc.

Westinghouse D. C. 3-wire 100 K. W. Generator direct connected to Atlas compound engine, 25 K. W. direct connected to Fisher engine, full switchboards, power-house, boilers, etc.

Income can be increased without much cost or labor. The whole plant, etc., cost the stockholders, etc., over \$50,000. Paying now about 6 per cent, on \$40,000.

Plant been running for about five years.

Terms of Sale.—One-fourth cash on day of sale, the residue in three equal payments, due in one, two and three years from date of sale, the purchaser giving bonds with approved personal security bearing interest from date, the title to the property to be retained as ultimate security.

L. M. McCLINTIC,

Receiver

NOTICE On the Map

that Quantico is on main line between

Washington and Richmond

conecting with the B. & O. and Pennsylvania on the North and main Southern lines on the South, affording rail facilities to any part of the country: also on Potomac River with deep water transportation.



FINE Industrial Sites

at Quantico, Va.

Large deposits high-grade clay—good chance for brick and clay industries. All kinds of wood, offering handle works, chair factories and woodworking plants generally a fine op-portunity. Favorable locations for knitting mills also.

Plenty cheap labor and no local taxation.

New manufacturing district.

Details gladly furnished by

H. B. HUTCHISON

Colorado Bidg., WASHINGTON, D. C.

Special Advertisements of General Interest.

"TIMBER TO BURN"

We have on our list some of the biggest bargains in tracts of timber, both soft and hard woods, that it has been our pleasure to offer the public, and intended buyers will do well to get our list.

We also have several coal properties for sale.

BELLER & WILSON
Headquarters for Timber and Coal. 402-404 Nat. Exchange Bank Bldg., ROANOKE, VA.

Best Land and Mineral Investment Ever Offered

I must sell at once the tract of land abounding in minerals, timber and excellent farming lands, described as follows

1500 acres in Cherokee County, Ga., on Etowah River, 50 miles north of Atlanta. 200 acres of this is in rich river bottom, worth \$200 per acre; balance of the tract in virgin timber. Lays fine for farming. All timber land would sell in 100-acre farms at \$40 to \$50 per acre. L. & N. R. R. and public roads run through it. Considered among the MOST VALUABLE IRON ORE LANDS IN GEORGIA; also good MARBLE taken FROM THIS LAND. OWNER VERY OLD, and must SELL QUICK to make DIVISION to HEIRS. MINERAL WORTH SEVERAL TIMES THE SACRIFICE PRICE, \$45,000.

F. MARION THOMASON, 405 Gould Bldg., ATLANTA, GA.

Complete Saw Mill Plant, Dry Kiln and Logging Equipment

FOR SALE

Mill has a dally capacity of 25,909 feet. Legging outfit consists of Locomotive, three and one-half miles of tramroad and six log trucks. Eighteen to twenty million feet of choice Pine timber, well blocked. Mill located about 25 miles south of Savannah, on the Seaboard Air Line Railway. Fifteen to twenty million feet additional timber can be lad in easy reach of this plant. For full controlline additional. ALBERT FENDIG & CO., Brunswick, Ga.

WATER-FRONT PROPERTY IN VIRGINIA

Suitable for factory development or private inventment. 73½ acres high land, 6½ acres open water with a fine water-frontage of 1426 feet on Deep Creek near Gilmerton, close to Navy-Yard and not far from City of Portsmouth.

This excellent water-front property will become very valuable in the near future. At present there are railroad facilities within 500 yards.

Will sell to quick purchaser for \$150.00 per acre.

S. L. NUSBAUM & CO.

Suite 600 Citizens' Bank Bldg., Norfolk, Va.

JAIL STEEL AND GELL WORK FOR SALE

Notice is hereby given that Marion County has for sale Steel and Cell Works for a small jail, constructed by the Manly Jail Building Company, Dalton, S. T. Sistrunk,

Clerk Board County Commi Ocala, Fla.

WANTED

Location for Silk Mill

Silk Mill.—An old-established firm wishes to start a branch mill in the Middle South where plenty of good labor and cheap power can be obtained. Would employ 300 or more, filter full particulars in reply. Address Silk Co., care Manufacturers Record.

MACHINE AND REPAIR SHOP FOR SALE

I have for sale a small machine shop and foundry, well located at a junction of two roads, well equipped for doing general re-pair work. Satisfactory reasons given for selling. Address

J. A. BROWN.

J. A. BROWN, Chadbourn, N. C.

Notice of Public Sale by the Trustee of the Property of the

GEORGIA COTTON MI

of Dublin, Laurens County, Georgia

Notice is hereby given that the undersigned Trustee, under that certain Mortgage Deed of Trust executed by the Georgia Cotton Mills, a corporation of Dublin, Laurens county, Georgia, on the first day of March. 1909, recorded in the office of the Clerk of the Superior Court of the said county of Laurens in Book 54, pages 19 et seq., to secure the issue of bonds therein mentioned, and also as Trustee under that certain other Mortgage Deed of Trust executed by the said Georgia Cotton Mills on the first day of October, 1916, recorded in said Clerk's office in Book 58, pages 510 et seq., to secure the Issue of bonds therein mentioned, defaults having occurred under the provisions of both mortgages, will sell at public outcry, to the highest and best bidder, and in accordance with the terms and provisions of the said Mortgage Deeds of Trust, at Dublin, Laurens county, Georgia, before the County Courthouse door, between the legal hours of sale, on the first Tuesday in December next, to wit, on Tuesday, December 4, 1911, all the property described in the said two Mortgage Deeds of Trust and mortgaged or intended to be mortgaged thereby, to wit. That tract of land containing sixty-three and sixty-five hundredths (63:55) acres, more or less, situated in said county of Laurens, State of Georgia, in the three hundred and sixty-four (164), and described in a plat recorded with a deed from W. W. Robinson to the Dublin Cotton Mills, dated November 29, 1899, in the office of the Clerk of the Superior Court of Laurens County in Book 8 of Deeds, folios 54 and 55; also that tract lying in the First Land District of Eaurens county, Georgia, known as the Robinson Mill Place or Lot, containing twelve (12) acres, more or less, less two (2) tracts of two (2) acres each sold off from said tract; also that tract containing two (2) acres, more or less, being in the First Land District of said Laurens county. The cotton mill buildings and machinery for he said Georgia Cotton Mills being located on said property.

Also, all the entire text

and protection of sand property two mortgages.

Terms cash. Purchaser paying for title.
This August 28, 1911.
THE CITIZENS

THE CITIZENS' AND SOUTHERN BANK, By M. B. Lane, President.

ADAMS & ADAMS, Attorneys for Trustee, Savannah, Ga.

Trustee, Savannah, Georgia.

IF YOU ARE A MANUFACTURER AND WANT A GOOD SITE

let us tell you why you should investigate the sites we have for sale in Canton, the Industrial Suburb of Baltimore.

First-rate rail and water transportation. Fuel and raw material for almost any kind of industry readily obtained. Good labor securable. Right in the midst of a thriving manufacturing center. Southern market near and easily reached. In every respect these sites meet the requirements of modern

We will gladly go into detail with those interested.

CLOUD & CLARK

State Bank of Maryland Building

BALTIMORE, MD.

GEORGIA FARM LAND FOR SALE

About 10,000 acres fertile farm land within 38 miles of Savannah, Georgia; location and good water, suitable for colonization. A good stand of yellow plus estimated at 20,000,000 feet and thousands of cords of wood. Located for seven two main line railroads, giving low freight rates, secured by water trans; competition, to Northern markets, with all-year markets close at hand. Will necessary the contract of the contract of the contract with linancially solutions of the contract with linancially solutions of the contract with linancially solutions of the contract with linancially solutions.

W. W. ROBERTSON, Owner

NORFOLK, VA.

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An Up-to-date Wood Working and Saw Mill Plant for Sale

Complete in every particular. Covering 2½ acres of land in the center of Norfolk, now doing a business of over \$100,000 per year. For sale cheap. Details furnished on application.

ABBOTT MORRIS & CO.

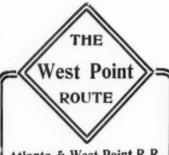
NORFOLK, VA



A progressive city of seven thousand population, situated in Piedmont North Carolina, having two lines of railway and a large manufacturing population, contains neither ice plant nor coal yard. This city affords an exceptional opportunity for the establishment of such an industry to the man who understands the business and is in a position to furnish good credentials and a reasonable amount of capital. This offers a good opportunity for getting into a profitable business. For further particulars write File M-3811, F. H. LaBaume, Agricultural and Industrial Agent, N. & W. Ry. Co., Roanoke, Virginia.

TIMBER LAND FOR SALE

A tract of 757 acres of hardwood timber land, situated in Piedmont Virginia, is offered for sale. This property is situated eight miles from transportation, all downgrade haul, easy logging, and estimated to cut about three million feet of hardwood, consisting of poplar, white oak, chestnut and other timber. This is long-bodied, large size virgin timber. Price, \$10,000 in fee, or would prefer to sell timber at a reduction. For further particulars write File M. 3759, F. H. LaBaume, Agricultural and Industrial Agent, N. & W. Ry. Co., Roanoke, Virginia.



Atlanta & West Point R.R.

THE WESTERN RAILWAY OF ALABAMA

Offers excellent locations for

Truck, Fruit, Stock

And General Farming Available Factory Sites. Abundance of Raw Material and Good Transportation Facilities. Write for information.

R. E. LUTZ

General Agent

MONTGOMERY, ALABAMA

Brick Plant for Sale

An up-to-date brick plant in Piedmont setton of N. C.; capacity 39,690 per day; good clay; excellent shipping facilities; entroutput could be sold within twelve miles of plant; good reason for selling. Address "Brick," care Manufacturers Record.

Controlling Interest in a Hardwood Plant FOR SALE

Consisting of complete stave mill, pl mill, wagon felloe and telephone mill Best hardwood plant in Oklahoma money-maker.

F. E. ADAMS, Atoka, Okla.

SAFE FOR SALE
FOR SALE—Large Diebold (fire and burglar proof) safe; double doors with combination lock, inside chest for money and securities with time lock; suitable for small bank or large mercantile house. For exact dimensions and price address Drawer No. 524, Rosnoke, Va.

Stone Quarry & Crushing Plant

FOR SALE

Location, Wake county, North Carolina
Steady demand for entire output at good
prices. No other quarry in this section
Capacity, 300 tons crushed stone per day.
Will sell cheap.

AMERICAN STONE CO.,
P. O. Box 538, Richmond, Va.

Unusual Bargain in a Cotton Mill

The Plant of ELIZABETH COTTON MILLS, located near Atlanta, Ga., is to be sold by October 3d next

Plant is completely equipped for making Fancy Dobby Weaves, producing about 40,000 pounds of Cloth and 10,000 pounds of 50's and 40's Hosiery Yarn Monthly.

The mill as now equipped contains 10,500 Spindles and 251 36" and 40 Looms, all equipped with 16 and 20 Harness Dobbies.

Buildings are of standard construction and contain complete MOIST-ENING. HEATING, LIGHTING and SPRINKLER SYSTEM of modern design, with sufficient space, power and preparatory machinery for an additional 4500 Spindles. The VILLAGE consists of 48 Operative Houses, Warehouses, Church, Office and GINNERY, located on the 36 acres of land. This PROPERTY recently appraised by a competent Mill Engineer at \$178,000, exclusive of value of land.

Private sale of above property can be arranged prior to October 3d. FOR INFORMATION ADDRESS

F. W. STONE, Trustee,

ER

MD.

ALE

LK, VA.

Norfolk.

(, VA

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ale

entire miles of Address

od Plant

Plant

ATLANTA, GA.

Up-to-Date Planing Mill Complete For Sale at a Bargain

Consisting of five planers, two band re-saws, two band rip-saws, set of heads and knives for all clases of work, engine, belts, pulleys, shaftings and filing room machinery complete, all good as new. Machines and saws built by American Woodworking Machinery Co.

BELHAVEN LUMBER CO.

BELHAVEN, N. C.



Opportunity for Young Man

st desirable opportunity is offered the roung man to connect himself with the best small mills in the Oho Val-be high quality of its flour and per-se are not excelled by any of the larg-is in the United States. Address LOCK BOX 12. Warsaw, Kv.

Engines. Boilers. Generators. etc.

2 30x48 Corliss Engines. 2 21x48 Corliss Engines. 1 22x28 Ruckeye Engine. 2 Phoenix Tandem 12 and 20x16 Engines. 1 Allis Corliss Tandem, 22 and 24x48 Eugine. Engines direct connected to generators. Engines direct connected to generally SEND for list and prices.
THE DORNER RAILWAY EQUIPMENT CO.

Bargains in Machinery and Supplies.

resepower "Otto" Gas Producer gine, dynamo, producer, switch-electrical equipment, complete, be year ago. No expense was make this a model installation, and description can be found on the March number of "Metal Inan be inspected upon application.

THOMAS A. PAINTER,
New York

GALVANIZED STEEL WATER TANKS

2 Tanks, 7' 8" diameter, 5' deep. 2 Tanks, 7' 8" diameter, 712' deep. Good as new.

WICKES BROTHERS

JERSEY CITY, N. J.

GOOD MODERN MACHINE TOOLS

1736 Newark "Binze" Horz, Boring Mill.

27 Keystone Horz, Boring Mill.

28 Bridgeport Vertical Boring Mill.

29 Bridgeport Vertical Boring Mill.

20 Bridgeport Vertical Boring Mill.

20 Miles Grae Wheel Boring Mill.

21 Niles Car Wheel Boring Mill.

22 State Wheel Boring Mill.

23 State Heavy-Duty Engine Lathe, Bottly Draper Engine Lathe, Car Taper.

24 Fifield Heavy-Duty Engine Lathe,

24 Pond Engine Lathe,

25 Pawis Engine Lathe,

2 Brown & Sharpe Universal Milling Machine.

blne. Putnam Universal Milling Machine. Brown & Sharpe Universal Milling Ma-

1 Brown & Sharpe University chine, chine, chine, a Kempsmith Plain Milling Machines.
8 Kempsmith Plain Milling Machines.
8 Jones & Lamson Flat Turret Lathes.
18 Jones & Lamson Flat Turret Lathes.
18 Jones & Lamson Flat Turret Cathes.
18 Jones & Lamson Flat Turret Lathes.
18 Jevaland Auto. Screw Machines, 5% cap.
18 Jevaland Auto. Screw Machines, 5% cap.
18 Juengst Back-Geared Shapers.
14, 16" Shapers.

st Back-Geared Shapers.
Shapers.
Plaintield Planer.
Foodward Powell Planer.
Flai Wks, Slotter.
Radial Drills.
sage Multiple Punch.
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wn & Sharpe Universal Grinders.
lis Universal Grinders.

J. NUTTALL. 1744-1750 N. Fifth St., Phila., Pa

Gas Power and Electrical Equipment DYNAMOS and MOTORS

Belled Generators Alternating Current Motors Direct Current Motors 300 OF THEM

Thoroughly overhauled and fully guaranteed.

In stock for immediate delivery.

We Buy, Sell, Repair, Rent or Exchange.

E. LEVENE & CO.

124 N. 3rd. St., Philadelphia

SECOND-HAND SAW MILL MACHINERY

We have at Woodblue, W. Va., the following, which we wish to sell, and will dispose of same at a low price:
One 7' Clark Band Mill in good condition.
One Clark Three-block Carriage, opens 40."
One 8" Clark Steam Feed.
One 3' Climax Engine, 18-ton.
Twelve 3' gauge 15-ton capacity log cars.
Three 3' gauge 8-wheel Lumber Trucks.
One Stationary Engine, 29 horse-power.
If you can use any of the above, please write
G. G. STITZINGER & CO.

G. G. STITZINGER & CO., New Castle, Pa.

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GURLEY (Level Bubble and Stadia)	
HELLER AND BRIGHTLY (Plain)	80.00
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K. & E., 181	
SAWYER, 18"	. 50.00
K. & E., 15 ¹	. 45.00

And 50 others. Send for list.

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Second-Hand Machine Tools For Sale at Bargain Prices

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One 24"x8' Five-Step Cone-Head q, c, g, Lodge & Shipley Engine Lathe. One 34"x80" Fitchburg Lo-Swing Lathes. One No. 3 Lodge & Shipley Rapid Reduction Lathe with 8' bed.

PLANERS

One 36"x36"x10" Three-Head Sellers. One 36"x36"x26" Four-Head Sellers. One 42"x42"x20" Single-Head Putnam.

MISCELLANEOUS

One Whiton Revolving Centering Machine.
One Franklin Cold Saw, 3½" capacity.
Two No. 3 Nutter-Barnes Cold Saws, 6" capacity.
One Schuster ¼" Riveter, Model "A."
One Mumford 12"x10" Power Ramming Molding Machine.
One Globe Fower Hack Saw, 8" capacity.
One Universal Power Hack Saw, 6" capacity.

THE LODGE & SHIPLEY MACHINE TOOL CO.

Cincinnati, Ohio, U. S. A.

CORLISS ENGINES

1 18x2â Bates.
1 16x42 Brown.
1 18x42 Lane & Bodley.
1 29x48 Wetherfil.
1 22x48 Hamilton. 1 22x48 Allis.
1 24x42 Atlas.
1 28x51 Hamilton.
Automatic Engines of all sizes.
1 40-ton Corliss Engine Type De La Vergne Ice Machine.
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1 tot Brewery Tanks.
Woodworking Machinery of all kinds.
Belting, Shafting, Pulleys and Hangers.

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Two 150 K. W. 225 volts Western Electric enerators, direct connected to Erle Ball andem Compound Engines. Also smaller zees in stock. Engines, Bollers, Pumps, Heaters and Concessers, new and second-hand.

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ENGINES AND CONTRACTORS' EQUIPMENT FOR SALE

Three pairs twin Corliss engines, cylinders 20 by 42. Will sell at sacrifice. Guaranteed in first-class condition and can be delivered immediately. Can be separated if desired.

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BOSTON IRON & METAL CO., BALTIMORE, MD.

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I buy, sell, rent and exchange.
The best and the cheapest.
Let me know what you have for
sale and what you want to buy.

THOMAS YEARSLEY
3rd St. Philadelphia, Pa.



16th and Lincoln Sts., CHICAGO.

We have the largest stock of second-hand electrical machinery in the world. Send for our "monthly Bargain sheet," showing the stock with net prices. We can pletely overhauled, tested and shipped practically "as good as new."

PLANERS

1 84"x84"x20" "Sellers," two heads on cross rail.
1 84"x84"x14" "Sellers," two heads on cross rail, one side head.
Both worm drive, in good condition.
We also have a full line of smaller Planers in stock. Send us your inquiries.

L. F. SEYFERT'S SONS, INC., 437-441 North 3d St., Philadelphia

FOR SALE

One 26"XM Lathe. One 20"XM Lathe. One 18"XM Lathe. One 14"X6" Lathe. One 30 H. P. Traction Engine. One No. 2 B. Koehring Cement Mixer. One No. 1 Smith Mixer, with solid engine. One No. 1 Smith Mixer, with boller and engine. Two 12s H. P. Hor. Tub. Rollers. Two 110 H. P. Hor. Tub. Bollers. Two 110 H. P. Hor. Tub. Bollers. Two 110 H. P. Hor. Tub. Bollers. Two Matchers, 4"X9". One Mississippi Planer and Matchers, 4"X1". CHAS. T. LEHMAN. Birminghan, Ala

LATHES.

10x44 Lodge & Davis, chucks fitted.

11x4 Mann, R. & F.

14x6 Davis, plain rest.

14x8 Le Biond, plain rest, chuck, P. C. F.

16x8 Red, compound rest, P. C. F.

16x8 Fay & Scott, plain rest, P. C. F.

16x8 Lodge & Slipley, patent head chuck.

20x8 McMahon, compound rest, P. C. F.

18x8 Lodge & Slipley, patent head chuck.

20x8 McMahon, compound rest, P. C. F.

21x14 Reed, high speed.

27x12 Pratt & Whitney, C. R., P. C. F.

28x10 Putnam, C. R., P. C. F.

28x10 Gleason, compound rest, taper.

30x12 Pond, C. R., P. C. F.

20x17 Bement-Miles, C. R., triple geared.

3x18 Newark, triple geared, C. R., P. C. F.

40x18 Newark, triple geared, C. R., P. C. F.

102x35 Bement, compound rest, T. G.

21x14 Powell, compound rest, P. C. F.

28x13 Fitchburg, C. G., C. R., P. C. F.

28x13 Fitchburg, compound rest, P. C. F.

SCREW MACHINES.

SCREW MACHINES.

2724 Jones & Lamson, flat turret.

20x6 Bardner & Oliver, friction head.

No. 2 %" Warner & Swasey, wire feed.

No. 1 Garvin, wire feed, friction head.

No. 1 Garvin, wire feed.

%" National Acme, automatic.

No. 6 Brown & Sharpe, friction head.

1" Smurr & Kamen, wire feed.

4", %", 1" and 2%" Pratt & Whitney automatics.

No. 2 2" Pratt & Whitney, wire feed.

No. 2 %" Pratt & Whitney, wire feed.

No. 17-16" Pratt & Whitney, wire feed.

MILLERS.

MILLERS.

No. 2 Cincinnati, piain.
No. 4 Cincinnati, piain.
No. 2 Le Bionde, piain, back gears.
No. 2 Part & Whitney, Lincoln pattern.
No. 24 Brainerd, piain, back gears.

LATHES.

ELECTRICAL EQUIPMENT

Direct-Connected Lighting Sets. 110-125 volts. 9 K. W. Crocker-Wheeler, with Case Engine. 15 K. W. General Electric, with Ideal Engine. 100 K. W. General Electric, with Bull Engine. 10-25-50-100 K. W. 110-125-volt Belted Genera-

tors. K. W. Thresher, 110-125-volt Belted Unit. 0-75-100 K. W. 220-250-volt Belted Genera

tors.
5-10-20-25-30-50-70 H. P. 220-volt Motors.
150 and 300 K. W. Belted Alternators, 2 and 3 phase, 25 and 60 cycles.
Alternating Current Motors, all sizes, cycles and voltages.
Electrical machinery of all kinds purchased. Send list of what you have.
Write for list and prices.

DANIEL KILLION, 211 N. Third St., Philadelphia, Pa.

"220 VOLT" MOTORS

Just Purchased

Just Furchased

13-10-H. P. D.-C, Motors, speed, 1325.
Condition like new. Complete equipment.
Also "Spare Parts" 1-Extra Armature. 1Set Shunt Field Coils. 3-New Commutators.
Low Prices, Factory Guarantee.
MANY OTHER BARGAINS. SEND FOR

Special attention to repairs, installations and reconstruction of Electrical apparatus.

MILLER-OWEN ELEC. CO.

100 H. P. Engine

FOR SALE

One McEwen Center-Crank Engine, 13x14, normal 100 H. P. This engine is in the very best of condition and is for immediate deliv-ery. Will sell at less than real value to quick

ELECTRIC LIGHTING PLANT, Johnston, S. C.

No. 1 Cincinnati, universal. No. 2 Brown & Sharpe, plain. No. 3 Cincinnati, plain. No. 12 Brown & Sharpe, manufacturers.

DRILLS.

DRILLS.

20" Prentice Bros., power feed.
15" State, sensitive.
4 Bickford, plain radial.
No. 25 Foote-Burk, high speed.
F 12" Baker Bros.
10-spindle Gardam, adjustable.
40" New Haven, sliding head, back gears.
5' Baush, plain radial.
5' Baush, plain radial.
7-spindle State, bedstead.

SHAPERS.

MISCELLANEOUS.

MISCELLANEOUS.

Boring Mill, 37" Bullard, 2 heads. Grinder, Seliers, universal tool. Planer, 36x36x8 Betts, 1 head. Planer, 26x26x8 Pond, 2 heads. Planer, 26x26x8 Pond, 2 heads. Planer, 48x45x8 Farrell, 1 head. Planer, 48x45x1 Fond, 3 heads. Boring Mill, 10' Pond, 3 heads. Boring Mill, 10' Pond, Grinder, Walker, electric surface. Grinder, No. 2½ Bath, universal. Gas Engine, 8 H. P. Fairbanks. Hammer, 50 lbs., Bradley, compact. Hammer, 1000 lbs., Pratt & Whitney, drop. Gear Cutter, 16x4 Gould & Eberhardt. Grinder, 12x42 Landis, universal. Pipe Machine, No. 2 Davis. Brake, 8' Niagara.

Pipe Machine, 3" Jarecki. Gas Furnace, No. 17 American.

" Gould & Eberhardt, crank
" and 20" Hendey, friction.
" Lodge & Davis, crank.
" Cincinnati, geared.

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Factories Mills **Machine Shops**

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OF EVERY KIND

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RAILS FOR SALE

29, 29, 49, 56 and 69-pound Relayers. 8 miles 35-pound Relayers. 25 miles 50-pound Relayers. Locomotives, Log Cars, Spikes, Bolts, Frogs and Switches. Address NATIONAL HON & STEEL COMPANY,

Direct Connected Units

FORMERLY USED FOR LIGHTING

Of Brooklyn Bridge

Unit No. 1. Walker generator, 425 amp., 125-volt, speed 280 rpm., D. C., Ball & Wood engine.

Unit No. 2. Walker generator, 425 amp., 125-volt, speed 280 rpm., D. C., Ball & Wood engine.

Unit No. 3. C. & C., 6-pole, 400 amp., 125-volt generator, 280 rpm., D. C., Reeves Hor. engine.

Unit No. 4. Fort Wayne generator, 75 kw., 6 pole, 125 volt, speed 275 rpm., D. C., 14x14, McEwen engine.

Unit No. 5. Fort Wayne generator, 75 kw., 6-pole, 125-volt, speed 275 rpm., D. C., 14x14, McEwen engine.

These two had only one year service.

Unit No 6. C. & C. generator, 60 kw., 125-volt, speed 275, D. C., Ball & Wood engine.

Unit No. 7. C. & C generator, 60 kw., 125-volt, speed 275, D.C., Ball & Wood engine.

All the above in perfect condition and immediate delivery. Offered at attractive

Passes to inspect and all information, prices, etc., sent on application.

Jos. H. Thompson, Jr., Co.

IN STOCK

Rebuilt and guaranteed for immediate delivery

BOILERS.

1 150 H. P. Manning Vertical Tubular, 125 lbs.

1 150 H. F. Maidding vertical Futural, 125 lbs.
steam,
1 86"×18" Horizontal Return Tubular, 125 H.
P., 125 lbs. steam,
1 80 H. P. Heine Water-Tube, 125 lbs. steam,
1 80 H. P. Economic, 190 lbs. steam,
1 75 H. P. Economic, 190 lbs. steam,
SPECIAL—Cheap before removal,
2 60"×20" Horizontal Return Tubular, 125 H.
P., 120 lbs. steam, with Wilkinson Stokers,
Large stock of return tubular and vertical
types, all sizes.
ENGINES.
28"×44" Reynolds. 26"×89" Cerliss

ENGINES.

28"x48" Reynolds.
26"x89" Corliss.
24"-44"x48" Cooper Tandem Compound.
22"x42" Greene.
29"x42" Greene.
29"x42" Greene.
16"x33" Bates.
214"x32" Wats-Campbell.
12"x22" Russell.
12"x24" Greene.
12"x24" Buckeye.
Large stock of smaller sizes; also automatic and plain slide-valve, vertical and horizontal.

AIR COMPRESSORS.
24"x24"x26" Rand Single Straight Line, vertical.

AIR COMPRESSORS.

24"x24"x30" Rand Single Straight Line, 199
cu. ft.

22"x22½"x24" Ingersoil-Sargeant Straight
Line, Class A. 975 cu. ft.

10"x10" X10" Cox & Sons Duplex, 275-250 cu. ft.

10"x10" Blaisdell Single, 135 cu. ft., belt
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Large stock of smaller sizes.

S25 K. W. 250-volt D. C. Westinghouse, direct connected to 19"-44"x48" Greene-Wheelock Engine.
135 K. W. Fort Wayne, 230-volt, D. C. direct connected to 14"x16"22"x16" Ide Tandem Comp. Engine, 294 R. P. M.
25 K. W. 125-volt D. C. Westinghouse, 6-pole, direct connected to 10"-18"x10" Westinghouse Compound Engine, 315 R. P. M.

BELTED GENERATORS.
200 K. W. 250-volt Western Electric, 6-pole, belt driven, 500 R. P. M.
Large stock of Dynamos, Motors, all sizes.
HOISTING ENGINES.

HOISTING ENGINES,

8½"x12" Webster, Camp & Lane, D. C., 8, D.
7"x10" Lidgerwood, D. C., D. D., 40"x7" boller,
7"x10" Ryan & McDonald, D. C., D. D.
7"x8" Copeland & Bacon, D. C., S. D., with
base fitted for boller,
6'4"x10" Flory, D. C., D. D. with 36"x7" boller,
6'4"x10" Davis, S. C., S. D.
6'4"x10" Mundy, D. C., D. D.

WESTINGHOUSE ENGINES,

1 12"x92"x12" Westinghouse Compound, 15"

WESTINGHOUSE ENGINES.
13"x22"x13" Westinghouse Compound, 15200 H. P.
12"-29"x12" Westinghouse Compound, 191100 H. P.
11"-19"x11" Westinghouse Compound, 89-126
H. P.
2 10"-18"x10" Westinghouse Compound, 65-196
H. P.
Large stock of Junior and Standard types.

FLYWHEEL.

FLYWHEEL.

40-ton, 25 ft. diam., 24" bore.
FEED-WATER HEATERS, PUMPS, GAS
AND GASOLINE ENGINES, STONE
CRUSHERS AND GENERAL EQUIPMENT.

MACHINE TOOLS PLANERS.

36"x36"x8' Betts. 26"x26"x7' Wheele 20"x20"x4' Sellers.

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26"x16' Triple Geared.
26"x14' Fitchburg Lathe.
24"x10' Modern, blocked to 34".
22"x16' Draper. 22"x18' Harrington.
20"x10' 6" Rahn-Carpenter.
20"x10' Rahn-Carpenter.
20"x10' Rement-Miles.
20"x2' Lodge & Davis.
16"x8' Rahn-Carpenter.

15"x3" Cathot-Carpenter.
15"x3" Carroll-Jamelson.
15"x3" Carroll-Jamelson.
12"x3" Graves & Klausman.
Two 17"x3" Greaves & Klausman.

MILLING MACHINES.

No. 3 Garvin Plain Miller, with dividing heads.

heads.
No. 2½ Pratt & Whitney Horizontal Miller.
table 11"55".
No. 2 Cincinnati Universal Milling Machine.
complete, with vertical attachment, like complete, with vertical accordance.

About 20 Lincoln Type Milling Machines.

SHAPERS.

26" Gould & Eberhardt.
20"x30" Pedrick & Ayer, open side.
20" Steptoe.
16" Steptoe.
20" Smith & Mills.
14" Steptoe.
14" Steptoe.
15" PRESSES.

Six No. 2½ Philadelphia Power Presses Two No. 1 Philadelphia Power Presses PG-5 Ferracute. No. 3 Bliss Geared. No. 63 Bliss Geared.

48" Gang Radial. 36" Morris Radial.
42" Hilles & Jones.
36" Gould & Eberhardt Upright Drill, with taper attachment.
20" Plain.

MISCELLANEOUS.
50-lb. Little Giant Trip Hammer.
1/4" Wells Bros. Bolt Cutter.
No. 13 Pratt & Whitney Profiler.
48" Gang Radial Drill.
36"x12' Slab Miller.
8" Eaton, Cole & Burnham Pipe Machine.
Two No. 5 Springfield Oscillating Surface Grinders.

No. 14 Garvin Turret Lathes.
Bement-Miles Single Frame Steam

FRANK TOOMEY, Inc. HUDSON TERMINAL BUILDING, NEW YORK 127-131 N. 3rd St. - Philadelphia, Ps. tract MAR

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Ibs. steam.
1. steam.
2. steam.
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automatic horizontal,

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Straight

RATORS use, direct ene-Whee-

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x7' boiler, b. D., with 'x7' boiler.

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The following Engines, purchased for use at Brooklyn Bridge, New York, in best of condition, will be sold at attractive prices and are a positive "find" for one who is contemplating installing a heavy Engine. Immediate Delivery.

1-1000 hp., 38x48 Wright Corliss, fly-wheel 25' in dia.

1-750 hp., 30x48 Wright Corliss, fly-wheel 20' in dia,

1-475 hp., 25x48 Wright Corliss, fly-wheel

1-325 hp., 22x36 Wright Corliss, fly-wheel

BARNEY HESS

77 Delavan St. Brooklyn, N. Y.

Western 5-ft, Plain Radial, Gear Box and Tapping Attachment. Condition, Gilt Edge. Bement Planer 42"x36"x8', Two Heads. Condition, Good.

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Pump For Sale

One triple 8x10 Dean Electric Pump, capacity 300 gallons per minute, 6-inch suction, 5-inch discharge, without motor. Pump never been installed, as it was not needed. Can be bought at a bargain, as not now needed. Particulars furnished on application.

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Second-hand Motors, Engines and Pumps for Sale Cheap

Silde-Valve Engine, 10x16".

12x16" Herron Pump.
Rotary Blower, ½" size.
7½x8½x12" Dean Pump.
4½x3½x1" Worthington Pump.
4½x3½x1" Worthington Pump.
8x2x3" Frick Corliss Engine.
8x2x3" Worthington Pump.
90 K. W. Crocker Wheeler Generator, 220
volt, D. C.
Root Rotary Blower, size No. 3.
29 H. P. Westinghouse Motor, 220-volt, D. C.
30 H. P. Westinghouse Motor, 220-volt, D. C.
15 H. P. Crocker-Wheeler Motor, 220-volt, D. C.
55 H. P. Crocker-Wheeler Motor, 220-volt, D. C.
56 H. P. Kestinghouse Motor, 220-volt, D. C.

D. C. 1 10 H. P. Hobart Motor. 1 5 H. P. Hobart Motor. 1 3½x1½x3" S. V. Pump.

GENERAL PIPE & FOUNDRY CO., Atlanta, Ga.

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Four 100 H. P. Portable Return Flue Boilers, 12"x15" Erie City Englne, 12"x16" Birmingham Engine, 18"x22" H. S. & G. Engine, R. Hand Knife Grinder, 10" Outside Molder.

Tampa Machinery Exchange,

Rebuilt Engines and Boilers

Engines—Corliss.—18x42 Lane & Bodley.
8x36 Ohlo Heavy Duty, 16x42 Allis, 12x30
Lane & Bodley.
Engines—Automatic.—14\(^4\)x24 Buckeye,
1x16x12 Buffalo Compound, 13\(^4\)x15 Taylor,
3x16 Atlas, 13x12 Harrisburg-Ideal, 13x12
Phoenix, 12x14 Green, 12x12 Armington &
Sims, 11x16 Atlas, 10x12 Valley, 8x14 Noyes.
Engines—Throttling.—18x24 Atlas, 14x
8 Sinker-Davis, 14x14 Lewis Vertical, 12x16
Reed, 12x14 Brownell, 10x16 Bass, 10x12 Atlas,
x14 Lane & Bodley, 8x10 Erle, 6x8 Industrial.
Boilers—Stationary.—72x18, 66x16 HighPressure, 72x18 Standard, 72x16, 6x18, 60x16,
6x14, 45x14, 44x14, 44x12, 42x12, 36x16,
ftc.

60x14, 54x14, 48x14, 44x14, 44x12, 42x12, 36x16, etc.

Boilers—Fire Box.—100, 80, 60, 50, 40, 35, 30, 25, 20, 16, 12, 10 and 8 II. P., etc.

Boilers—Vertical.—50, 40, 35, 30, 25, 20, 16, 12, 10, 8, 5 and 3 II. P., etc.

Heaters.—All sizes, Open and Closed.

Pumps.—All sizes, Single and Duplex.

Electrical.—30 K. W. Generator, direct connected to 8x10 Skinner Engine; 20 K. W. Generator, direct connected to 8x10 Economic Engine; 18 K. W. Belted Generator.

Miscellaneous.—Sawmills, Lath Mills, Edgers, Cut-off Saws, Re-Saws, Blowers, Exhaust Fans, Tanks, etc. Write for list. Also full assortment of new machinery.

Sole manufacturers of the celebrated "Leader" Injectors and Jet Pumps. Send for circular.

THE RANDLE MACHINERY CO.

ENGINE BARGAINS

8x12" Eric City Automatic.
9x10" Ames Automatic.
19x10" Watertown C. C. Automatic.
19x14" At Automatic.
12x14" Atlas Automatic.
12x14" Atlas Automatic.
12x21" Buckeye Automatic.
14½x13" Armington & Sims C. C.
14½x13" Armington & Sims C. C.
14½x12" Eric City R. H. Automatic.
15x21" Eric City R. H. Automatic.
15x10" Rice R. H. Automatic.
15x10" Allis L. H. Corliss.
15x42" Cooper R. H. Corliss.
15x42" Allis R. H. Corliss.

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Machinery Bargains

1 14"x36" Girder Frame Corliss Engine.
1 14"x12" Girder Frame Corliss Engine.
3 66"x16" Horizontal Tubular Bollers, 125 lbs.
5 42"x14" Horizontal Tubular Bollers, 125 lbs.
5 72"x20" Horizontal Tubular Bollers, 100 lbs.
3 50 H. P., Gasoline Engines.
1 18½x81½x10 Worthington Duplex Steam Pumps.
1 18½x81½x10 Worthington Duplex Steam Pumps.
1 60" Sturtexant Heating Fan and 1500 ft. 1"
Pipe Coils, direct connected to 5x5 Vertical Engine.
1 80" Sturtexant Heating Fan with 2500 ft.
1 "Pipe Coils, direct connected to 5x5 Vertical Engine.
1 1" Pipe Coils.
200 High-grade Vault Doors.
200 100 to 8000-gallon capacity Tanks.
Write for our Bargain List No. 239.

CHICAGO HOUSE WRECKING CO. 35th and Iron Streets, CHICAGO, ILLINOIS

3/4-ton Swartz Oil Furnace

(Tilting Type)

For melting brass or iron. Complete with No. 2 Root Blower. Good as new.

WICKES BROTHERS

JERSEY CITY, N. J.

BOILER BARGAINS

ver W. J. LINTON PI 136 Liberty St., New York, N. Y.

Railroad and Contractors' Equipment and Supplies.

BOILER, DERRICK, DRILL, ENGINE FOR SALE

One 80 H. P. Roberts Water-Tube Boiler. One 25 H. P. Erie Engine, complete, with gov

one F-32 Ingersoll-Sargeant Rock Drill, with Steel Derrick, 81-foot boom, steel bull rheel, plow steel cable.

Address SEARING WILSON, 515 Penna, Bldg., Phila

Circular Saw Mill for Sale

Built by Filer & Stowell. Complete plan-ing mill, capacity 75,000 feet. All parts in ood working order. Will give same service s new, Price \$3000. An inspection will rove this a rare bargain. J. B. WATKINS, Lake Charles, La.

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6. 4 Williams White Bulldozer. §" Acme Upsetter, 6" stroke. 4b, and 40-1b, Bradley Horizontal Helve "Hammers.

Hammers, gator Shears, 14" and 24" knives, blb, and poog-lb, Double Leg Hammers, slb, Single-Leg Hammer, ls, new and relaying, and Contractor's Equipment.

Equipment, A. GREEN COMPANY, Pittsburgh, Pa.

FOR SALE OR RENT

10x16 Porter 38" S. T. Locomotives, 10x16 Baldwin 36" S. T. Locomotives, 13½x22" Baldwin 6-driver S. G. S. T. Loco-motive, 10-ton 3-wheel New York Road Rollers, 5-ton Tandem Iroquois Asphalt Roller, 2½-ton Little Giant Special Traction Steam Shovel,

Shovel. 26-ton Little Giant Standard Traction Steam Shovel

Shovel,
5 Lambert D. D., with boom swings, Electric Hoists, 39, 40 and 60 H. P., 220 volts.
39 Heisting Engines, Lambert, Mundy, Lidgerwood, skeleton or mounted, with and without boom swings, 8 to 50 H. P.,
2000 ft, 9" Spiral Riveted Galvanized Pipe (thereely)

2000 ft. 9" Spiral Riveten (flanged). 8 Steel Guy Derricks, 70' masts. 25 Wood Guy Derricks, 50 to 91' masts. Steam Pumps, Rollers, Rock Drills, Derricks, etc. Let us have your inquiries. HENRY A. HTYNER'S SONS CO., Philadelphia, Pa.

CONCRETE MIXERS ATTRACTIVELY PRICED

Second-Hand

All sizes, 1/8 inch to 24 inches Furnished with new threads and coupings, suitable for all practical purposes; large stock constantly on hand, together with a general assortment of used contractors machinery.

MARINE METAL & SUPPLY CO. NEW YORK

HOISTING ENGINES

HOISTING ENGINES

FOR IMMEDIATE DELIVERY

WITH BOILERS

2 7½"x10" Mundy, dble. cyl., dble. drum,
swinging gear.
7"x10" Lambert, dble. cyl., dble. drum, swinging gear.
7"x10" Lidgerwood, dble. cyl., dble. drum.
2 7½"x10" Mundy, dble. cyl., dble. drum.
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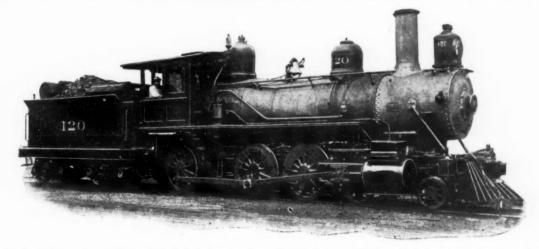


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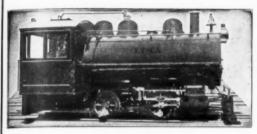
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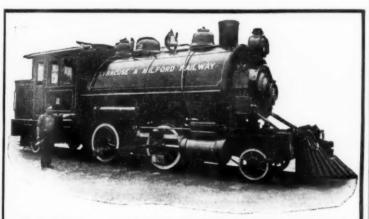
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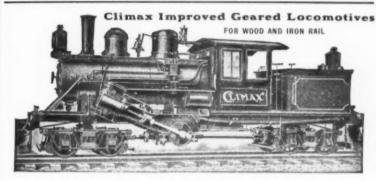


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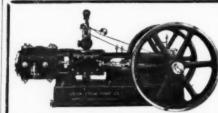
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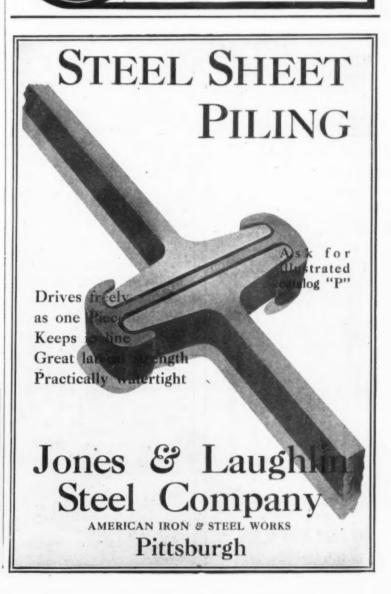
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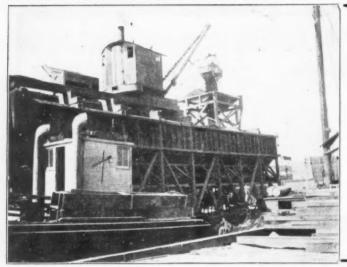


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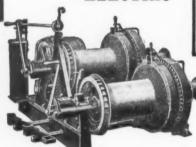
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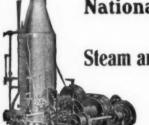
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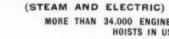
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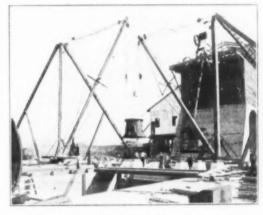
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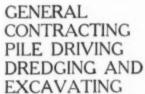
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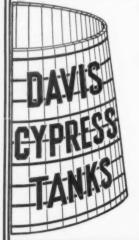
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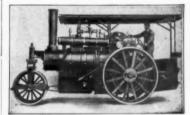


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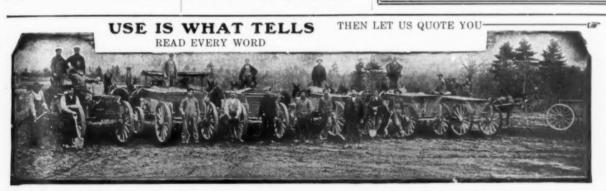
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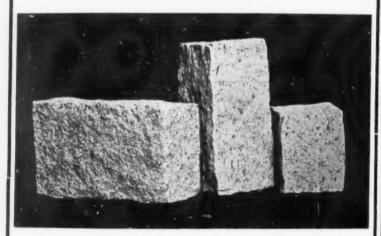
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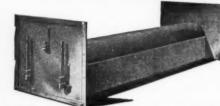
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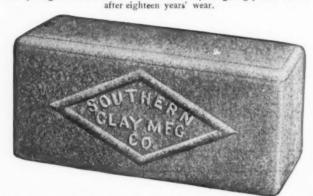
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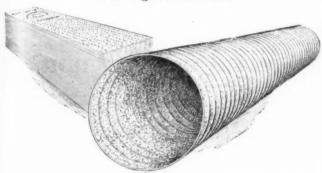
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These facts are worth remembering. They may save the inconvenience and expense of costly future replacements.





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These Corrugated Metal Culverts



STAND THE STRAIN

The heaviest loads do ot affect them.
Carefully made and Carefully made and thoroughly tested before shipped.

Made of "American Ingot" Iron, they cannot rust. They make a permanent installation, hey cost less than wood and are safer than their imitators. Used by the biggest railoads and the best road engineers. Write for "Book of Testa."

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Look for the trade mark. It means durability. Don't accept the imitations. We have the proof that our culverts will carry the heaviest loads that travel and will last for years where others fail. Write for Pamphlet A. on AMERICAN INGOT IRON and B. on culverts and tanks.

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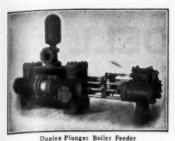


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COOK'S PATENT BRASS TUBE WELL STRAINER

COOK'S DEEP WELL PUMPING **ENGINES**

Estimates furnished upon application. Write for catalogue and prices.



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Deming Triplex Power Pump direct connected to electric motor.

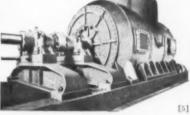
Ask for our general Catalogue of hand, wind-mill, power and spray pumps, or write us your specifications.

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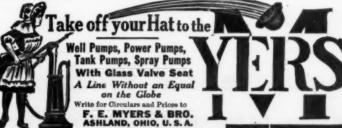
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THE MYERS BULLDOZER WORKING HEADS, PUMPING JACKS. CYLINDERS, ETC.

It is Not a Question of What Pump to Buy, but Which

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Is Best Suited to Your Conditions

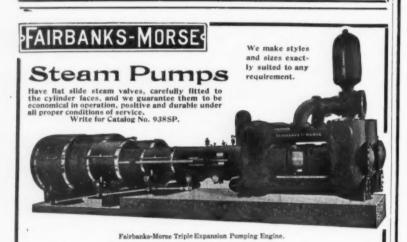
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Ejectors especially adapted for Municipal Installations

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Let us know your requirements and wwill place our engineering department at your disposal, giving you the benefit of their vast experience in this line.

We also manufacture Air and Gas Compressors, Vacuum Cleaning Systems, Gas Engines to 500 H. P.

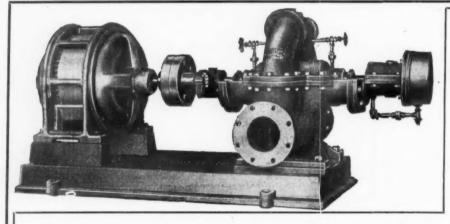
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A Small, but Conspicuous Part in

RAISING THE MAINE

Has Been Played by the

Jeanesville Centrifugal Pumps

Two of these pumps were used for unwatering the cofferdam surrounding the wreck—one of 4,000-gal, per min. capacity, driven by a 100-hp.

4,000-gal. per min. capacity, driven by a 100-hp. General Electric induction motor and one of 1,800-gal. per min. capacity, driven by a 50-hp. General Electric induction motor.

The most prominent reasons for the selection of these pumps for this important work were their ability to handle almost any kind of

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SPLIT CASING.—The casings of all Jeanesville standard pumps are divided horizontally so that they can be easily opened to give access to the interior. This does not involve any disturbance of the piping connections, as the suction and discharge openings are entirely in

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BALANCED END THRUST.—An advantage inherent in the double-suction volute pump (the type used at Havana) is the elimination of unbalanced end thrust common to all single-suction pumps, the water being taken in on both sides of the impeller.

Isn't it reasonable that pumps which were thought the best and proved the best for one of the most vital operations in this notable engineering work are the best for construction work of any kind? In motor-driven combinations they are particularly adapted to contractors' needs.

You could spend a profitable half-hour looking over our new catalogue J-3629. Shall we send it?

The Jeanesville Iron Works Company

New York Office: 115 Broadway

Works: Hazleton, Pa.

J119.

The Thousands of

Deane Pumps

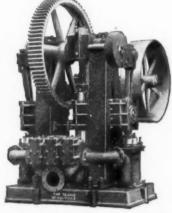
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Pumps for Tank Service, Elevators, Water Works or They can be operated by belt, water or motor, and are absolutely dependable under the most severe working conditions.

Bulletin D-16329 will tell you all about them

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Works: Holyoke, Mass. 115 Broadway, New York City

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The Slogan of the Cameron-"Character: The Grandest Thing"

Cameron Outside Packed Plunger Pump



Built to withstand the wearing qualities of gritty water-

Built to be readily accessible, easy to repair if anything should go

The Cameron Outside-Packed Plunger Pump is more durable than a piston pump.

The water end has no wearing parts except the packing in the stuffing boxes, which can be instantly adjusted from the outside. There are no rods, arms or working parts exposed to rust or damage. The plunger is supported in stuffing boxes, and cannot sag nor get out of line at the end of the stroke.

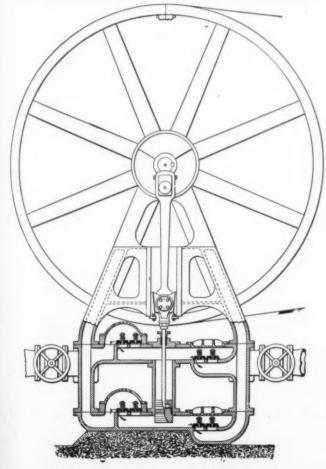
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Cameron Catalog No. 21 illustrates and describes all types of Cameron Pumps. Sent on request to interested pump users and intending purchasers.

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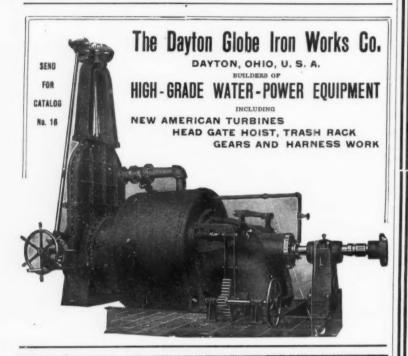
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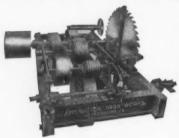
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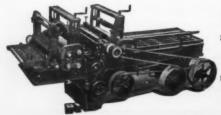


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CHAPTER No. 5

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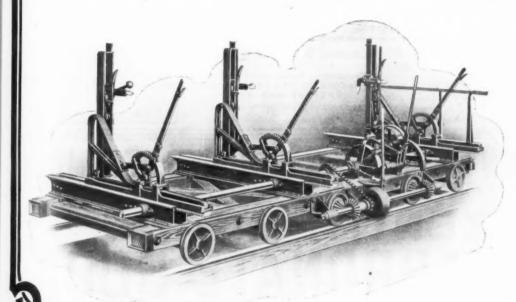
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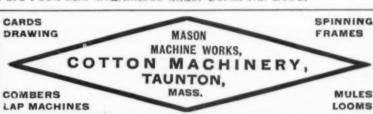
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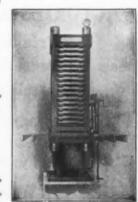
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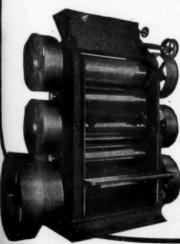
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It is a well known fact that climatic conditions of Southwest Texas are very conducive to the successful cultivation of a great variety of fruits. It is a fact, equally well known, that the process of decay sets in on the ripened fruit a good deal quicker here than in the colder climate of the North. As a result, bushels upon bushels and tons upon tons of fruit are annually lost to mankind, all or nearly all of which might be saved by canning.

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Fruit Canneries

are a necessity of the Southwest and that Texas City is the most favorable spot in the Texas Gulf Coast district.

A further reason is that Texas City is located directly in the heart of a rapidly developing fruit section. Thousands of acres are being cut up into five and ten acre tracts and are being set out to fruit trees. Thousands of dollars in freight charges and in the loss resulting from bruised and decayed fruit might be saved to the grower if canneries were on the ground, to say nothing of the saving to consumers if the cost of transportation were eliminated.

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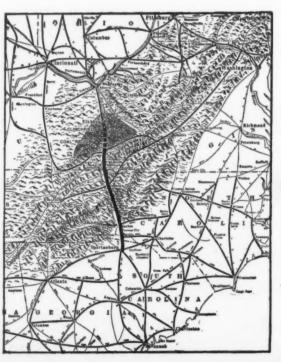
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The object of this railroad is to build up the territory it traverses, by centering the attention of the investor, the manufacturer, the homeseeker, upon its enormous industrial and agricultural advantages, and by co-operating in the fullest measure with its established business interests and those contemplating new undertakings.

Through its Industrial Department the Baltimore & Ohio would like to discuss with you the locations it has available exceptionally advantageous for your manufacturing plant, your business or your farm.

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W. W. Wood, Industrial Agent

Baltimore, Md.

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othran & Cothran, Greenwood, S. C.
oeth, L. A. H., Wilmington, N. C.
oetwood, Greene & Co., Boaton, Mass.
claughlin & Johnson, Lyuchburg, Va.
iliburn, Heister & Co., Washington, D. C.
orthup, Willard C., Whiston-Salem, N. C.
ettit & Cave, Danville, Va.
hand & Lafaye, Columbia, S. C.
irrine, J. E., Greenville, S. C. Hoble, Edward, Charlotte, N. C.

Architects' Supplies. Keuffel & Esser, Hoboken, N. J. Starrett Co., L. S., Athol, Mass

Blarrett Co., L. S., Alnoi, Masss.

Architectural Iron and Sheet Metal Work
Bolles Iron & Wire Works, J. E., Detroit, Mich.
Chesappeake Iron Works, Baltimore, Md.
Des Moines Bridge & Iron Co., Des Moines, Ia.
Behreiber & Sons Co., The L., Cincinnati, O.
Baned Architectaral Iron Works, Louisville, Ry.

Art Class. inswanger & Co., Memphis, Tenn

Art Glass and Prisms. (Set in Zine and Spiess Art Glass Co., G. A., St. Louis, Mo.

Asbestos.

Carolina Portland Cement Co., Charleston, S. C.
Johns-Manville Co., H. W., New York, N. Y.
Southern Fipe Covering Co., Inc., Richmond, Va.

Asphalt.
Armitage Mfg., Co., Richmond, Ya.
Barber Asphalt Paring Co., Philadelphia, Pa.
Gulf Redning Co., Pittsburg, Pa.
Texas Co., The, New York, N. Y.

Asphalt Roofing and Siding. (Bird Sand and Chipped Slate Surfaced.) Bermingham & Seaman Co., Chicago, Ill.

Automatic Buckets. owning Engineering Co., Cleveland, O.

Automobiles.

Interstate Automobile Co., Muncle, Ind. Jeffery Co., Thos. B., Kenosha, Wis.

Axles. [See Car Wheels, Axles and Trucks.] Babbitt Metal. [See Anti-Friction Metal.]

Badges. (Hat and Breast, Electric and Steam Road, Police and Fire Dept.) American Railway Supply Co., New York, N. Y.

Bakers' Machinery. ynn Superior Co., The, Cincinnati, O. Bankers and Brokers.

Bankers and Brokers.

Baltimore Trust Co., Baltimore, Md.
Delaware Trust Co., Wilmington, Del.
Florida Trust Co., Jacksonville, Fla.
Glenn, W. S., Spartanburg, S. C., Dallas, Tex.
Halsey & Co., N. W., New York, N. Y.
Lisman & Co., F. J., New York, N. Y.
Lisman & Co., F. J., New York, N. Y.
Mercantile Trust & Deposit Co., Baltimore, Md.
New First National Bank, Columbus, O.
Nuveen & Co., John, Chicago, Ill.
Bavannah Bank & Trust Co., Savannah, Ga.
Bhort & Son, John C., New York, N. Y.
Southern States Developm't Co., New York, N. Y.
Violett & Co., Atwood, New York, N. Y.

Violett & Co., Attwore, st.

Banks.

First National Bank, Baltimore, Md.

First National Bank, Richmond, Va.

First National Bank, Richmond, Va.

Guaranty State Bank & Trust Co., Dallas, Tex.

Merchants National Bank, Baltimore, Md.

New First National Bank, Baltimore, Md.

National Eachange Bank, Baltimore, Md.

Savannah Bank & Trust Co., Savannah, Ga.

Savannah Bank & Trust Co., Savannah, Gs.

Bank and Office Railings and Grilles.(Iron.)

Bolles Iron & Wire Works, J. E., Detroit, Mich.

Buckeye Wire & Iron Works Co., Columbus, O.

Chattanoga Iron & Wire Wise, Chat'n'ga, Tenn.

Chesnpeake Iron Works, Baltimore, Md.

Cincinnati Mg. Co., Cincinnati, O.

Dow Wire Works, Louisville, Ky.

Dufur & Co., Baltimore, Md.

Batey Wire Works Co., New York, N. Y.

Jones & Co., L. E., Baltimore, Md.

Meyers Mg. Co., F. J., Hamilton, O.

Ohlo Elevator & Machine Co., The, Columbus, O.

Bank Fixtures.
Quincy Show Case Works, Quincy, Ill.
Buse & Thompson, Baltimore, Md.

Bar Iron. (Refined and Galvanized.) Carnegie Steel Co., Pittsburg, Pa.
Micetown Plate Washer Co., Philadelphia, Pa. Bars, Wire, Wire Fabric, etc. (Steel for Con

crete-Steel Construction.)

American Steel & Wire Co., Chicago, III.

American System of Reinforcing, Chicago, III.

Cluchmatt Iron & Steel Co., Cluchmatt, O.

Concrete-Steel Co., The, New York, N. Y.

Corrected Bar Co., St. Louis, Mo.

Franklin Steel Co., Franklin, Pa.

Hoffman & Co., R. C., Baltimore, Md.

Jones & Laughlin Steel Co., Pittsburg, Pa.

Southern Steel Froducts Co., Inc., Bichmond, Va.

Wight & Co., W. N., New York, N. Y.

Fight & Co., W. (Ball.) Bearings. (Ball.) lyatt Roller Bearing Co., Newark, N. J. randard Roller Bearing Co., Philadelphia, Pa.

Bearings. (Brass Journal.) Gilbert & Sons Brass Fdry. Co., A., St. Louis, Mo.

Gilbert & Sons Brass Pury. Co., A., St. Leaun, and Bearings. (Oilleas.) North Amer. Metaline Co., Long Island City, N. X. Bearings. (Roller.) Hyatt Roller Bearing Co., Newark, N. J. Standard Roller Bearing Co., Philadelphia, Pa.

Bells. (Call.)

Bells and Gongs. atlantal Tube Co., Pittsburg, Pa. Festern Electric Co., New York, N. Y.

Western Electric Co., New York, N. Y.

Belting. (Leather, Canvas, Rubber.)

American Supply Co., Providence, R. I.

Balley-Lebby Co., Charleston, S. C.

Baltimore Belting Co., Baltimore, Md.

Cameron & Barkley Co., Charleston, S. C.

Chesapeake Belting Co., Baltimore, Md.

Diamond Rubber Co., Akron, O.

Dick, Ltd., R. & J., Passaic, N. J.

Druid Oak Belting Co., Inc., The, Baltimore, Md.

Gandy Belting Co., Inc., The, Baltimore, Md.

N. J. Car Spring & Rubber Co., Jersey City, N. J.

Rossendale-Reddaway B. & H. Co., Newark, N. J.

Williams & Sons, I. B., Dover, N. H.

Beiting. (Chain.)
Bartlett & Snow Co., C. O., Cleveland, O.
Caldwell & Sons Co., H. W., Chicago, Ill.
Jeffrey Mfg. Co., Columbus, O.
Link-Beit Co., Nicetown (Philadelphia), Pa.
Morse Chain Co., Ithacs, N. Y.

Belt Conveyors.

Jeffrey Mfg. Co., Columbus, O.

Robins Conveying Belt Co., New York, N. Y.

Belt Dressing.
Diamond Rubber Co., Akron, O.
Gandy Belting Co., Baltimore, Md.

Belt Fasteners. rescent Belt Fastener Co., New York, N. Y.

Bicarbonate Soda. (Sap Stain Lumber Dip.) nurch & Dwight Co., New York, N. Y.

Blackboards. (Slate.) ist Bangor Con. Slate Co., The, East Bangor, Pa. ower, J. K., Slatington, Pa. ower, J. & J., New York, N. Y.

Block Tackle. (For Wire or Manila Rope.) atterson Co., W. W., Pittsburg, Pa. Patterson Co., W. W., Pittsburg, Pa.

Blowers. (Soot.)

Bayer Steam Soot Blower Co., St. Louis, Mo.

Blowers and Exhaust Fans.

American Blower Co., Detroit, Mich.
Buffalo Forge Co., Buffalo, N. Y.
Clark Co., Geo. P., Windsor Locks, Conn.
De Laval Steam Turbine Co., Trenton, N. J.
Garden City Fan Co., Chicago, Ill.
General Electric Co., Schenectady, N. Y.
Green Fuel Economizer Co., Matteawan, N. Y.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Savannah Blow Pipe Co., Savannah, Ga.
Skinner Bros., St. Louis, Mo.
Standard Blower & Metal Mfg. Co., Atlanta, Ga.
Sturtevant Co., B. F., Hyde Fark, Mass. Blowers and Exhaust Fans.

Blueprint Apparatus.

Keuffel & Esser, Hoboken, N. J.

Boilers.
Abendroth & Root Mfg. Co., Newburgh, N. Y.
Ames Iron Works, Oswego, N. Y.
Bricock & Wilcox Co., New York, N. Y.
Bricownell Co., Dayton, O.
Cameron & Barkley Co., Charleston, S. C.
Casey-Hedges Co., Chattanooga, Tenn.
Chattanooga Boiler & Tauk Co., Chat'u'ra, Tenn.
Chitago, Ill.
Cole Mfg. Co., R. D., Newnan, Ga.
Cooper Co., C. & G., Mt. Vernon, O.
Gibbes Machinery Co., Columbia, S. C.
Goper Co., C. & G., Mt. Vernon, O.
Gibbes Machinery Co., Columbia, S. C.
Goper Co., C. & G., Mt. Vernon, O.
Gibbes Machinery Co., Columbia, S. C.
Keeler Co., E., Williamsport, Pa.
Lookout Boiler & Mfg. Co., Chattanooga, Tenn.
Lombard Iron Works, Augusta, Ga.
Mecklenburg Iron Works, Co., Sharon, Pa.
Phoenix Iron Works, Co., Sharon, Pa.
Phoenix Iron Works Co., Meadville, Pa.
Price Machinery Co., S. M., Norfolk, Va.
Schofield & Sons Co., J. S., Macon, Ga.
Smith-Courtney Co., Richmond, Va.
Southern Engine & Boiler Works, Jackson, Tenn.
Union Iron Works Co., Selma, Aleston, S. C.
Vogt Machine Co., Henry, Louisville, Ky.
Walsh & Weidner Boiler Co., Chattanooga, Tenn.
Boiler Setting.
Harbison-Walker Refractories Co., Pittsburg, Pa. Blueprint Apparatus. euffel & Esser, Hoboken, N. J.

Boller Setting. Harbison-Walker Refractories Co., Pittsburg, Pa Boiler Tubes. [See Tubes, Boiler.]

Boller Tubes. [See Tubes, Boller.]

Bolts, Nuts, Rivets, Studs and Washers,
Lebanon Valley Iron & Steel Co., Lebanon, Pa.
Milton Mg. Co., Milton, Pa.
Nicetown Plate Washer Co., Philadelphia, Pa.
Republic Iron & Steel Co., Youngstown, O.,
Russell, Burdsall & Ward Bolt & Nut Co., Port
Chester, N. Y.

Bonds. (Surety, etc.) Fidelity & Deposit Co., Bultimore, Md.

Boring. (Cylinder.) trickland Machine Co., Richmond, Va.

Bottling Outfits. Vilter Mfg. Co., Milwaukee, Wis.

Box Shooks. Naylor & Co., S. E., Gulfport, Miss. Brass Goods.

Bailey-Lebby Co., Charleston, S. C. Buckeye Iron & Brass Works, Dayton, O. Powell Co., Wm., Cincinnati, O.

Brazings. (Cast Iron.) Richmond Machine Works, Inc., Richmond, Va. Strickland Machine Co., Richmond, Va.

Brewers' Machinery.
Vilter Mfg. Co., Milwaukee, Wis.
Brick. (Building.)

Brick. (Building.)
Am. Enameled Brick & Tile Co., New York, N. Y.
Brookhaven Pressed Brick & Mfg. Co., Brookhaven, Miss.

Carolina Portland Cement Co., Charleston, S. C. Fiske & Co., Inc., New York, N. Y. Hood, B. Millin, Atlanta, Ga. Hydraulic Press Bick Co., St. Louis, Mo. Oconce Brick & Tile Co., Milledgeville, Gs. Sibley-Meuge Brick & Coal Co., Birmingham, Ala. Southern Clay Mfg. Co., Chattanooga, Tenn.

Brick. (Blast Furnace, Coke Oven.) Ashland Fire Brick Co., Ashland, Ky. Hood, B. Miffiln, Atlanta, Ga. Southern Clay Mig. Co., Chattanooga, Tenn.

Brick. (Enameled.) mer. Enam. Brick & Tile Co., New York, N. Y. Brick. (Fire Clay.)

Brick. (Fire Clay.)

Brookhaven Pressad Brick & Mfg. Co., Brookhaven Pressad Brick & Mfg. Co., Brookhaven Miss.

Brookhaven Pressad Brick & Mfg. Co., Brookhaven Miss.

New York, N. Y.

Harthoo-Walker Refractories Co., Pittsburg, Pa. Killian Fire Brick Works, Killian, S. C.

Louisville Fire Brick Works, Killian, S. C.

Louisville Fire Brick Works, Highland Park, Ky.

Pomona Terra-Cotta Co., Pomona, N. C.

Southern Clay Mfg. Co., Chattanoga, Tenn.

Stevens' Sons Co., H., Macon, Ga.

Taylor Sons Co., Chas, Cincinnati, O.

Union Mining Co., Mt. Savage, Md.

Brick. (Magnesia.) -Walker Refractories Co., Pittsburg, Pa.

Brick. (Paving.) Brick. (Paving.) Carlyle Paving Brick Co., Portsmouth, O. Copeland-Inglis Shale Brick Co., Birminghar Southern Clay Mig. Co., Chattanooga, Ten

Brick. (Silica.) arbison-Wulker Refractories Co., Pittsburg, Pa.

Brick and Clayworking Machinery and Supplies. Supplies.

American Clay Mchry, Co., The, Bucyrus, O. Carnell, George, Philadelphia, Pa.
Fernholtz Brick Manhrery Co., St. Loais, Mo. Freue & Co., E. M., Gallon, O. St. Loais, Mo. Gibbes Machinery Co., Columbia, S. C. Scott-Madden Iron Works, Keokuk, Iowa. Steele & Sons, J. C., Statewille, N. C. Taplin-Rice-Clerkin Co., Akron, O.

Brick Machinery. (Sand Lime.) [See Sand-Lime Brick Machinery.]

Brick Fireplaces. [See Fireplaces, Artistic

Brickwork. (Artistic.) ske & Co., Inc., New York, N. Y.

Bridges. (Concrete.) Concrete Steel Engineering Co., New York, N. Y. Raymond Concrete Pile Co., New York, N. Y. Rounoke Bridge Co., Roanoke, Va.

Bridges. (Rolling Lift.) herzer Rolling Lift Bridge Co., Chicago, III.

Scherzer Rolling Lift Bridge Co., Chicago,

Bridges.
American Bridge Co. of New York, New York, N. Y.
Baltimore Bridge Co., Baltimore, Md.
Bridges.
Bridge Co., Baltimore, Md.
Bridge Co., Bridge, D. Bes Mohres, Inc., Pishadelphia. Pa.
Chinoma From Works, Licenson, Hi.
Bridge Co., Pittsburg. Des Mohres, In.
Farris Bridge Co., Pittsburg. Pa.
Basouri Val. Bridge & Iron Co., Leavenw'th, Kan.
Owego Bridge Co., Owego, N. Y.
Riter-Conley Mfg. Co., Pittsburg. Pa.
Boanoke Bridge Co., Boanoke, Va.
Scherzer Rolling Lift Bridge Co., Chicago, Ill.
Vincennes Bridge Co., Vincennes, Ind.
Virginia Bridge & Iron Co., Roanoke, Va.
York Bridge and Structural Iron Paints.

Bridge and Structural Iron Paints Carolina Portland Cement Co., Charteston, S. C. Chattanooga, Palnt Co., Chattanooga, Tenn. Detroit Graphite Co., Joveni, Mich., Dixon Crucible Co., Joseph, Jersey City, N. J. Maryland Steel Co., Taint Dept., Sparrows Point, Mid. Peint, Md. Standard Paint Co., New York, N. Y.

Brimstone. on Sulphur Co., New York, N. Y.

Buckets. (Excustors.)
Browning Mfg. Co., Mansfield. O.
Hayward Co., New York, N. Y.
Monighan Mich. Co., Chicago, Ill.
Dwell Bucket Co., Cleveland, O.
Williams Co., The G. H., Cleveland, O.

Buckets. (Ore, etc.) Buckets. (Ore, etc.)
Brown Holsting Meby, Co., Cleveland, O.
Browning Mfg. Co., Manafeld, O.
Caldwell & Son Co., H. W., Chleago, Hl.
Dodge Manufacturing Co., Mishawaka, Ind.
Hayward Co., New York, N. Y.
Link-Belt Co., Nicetown (Philadelphia), Pa.
Owen Bucket Co., Cleveland, O.
Williams Co., The G. H., Cleveland, O.

Buhr Stones. Starr Co., B. F., Baltimore, Md.

Starr Co., B. F., Baltimore, Md.

Builders and Contractors.

Falls City Construction Co., Louisville, Ky.

Farris Bridge Co., Pittsburg, Pa.

Ferro Concrete Construction Co., Cincinnati, O.

Raymond Concrete Pile Co., New York, N. Y.

Selden-Breck Construction Co., St. Louis, Mo.

Upton-Smoot Construction Co., Washington, D. C.

White & Co., J. G., New York, N. Y.

Buildings. (Financed.) ., Louisville, Ky

Building Supplies. Building Supplies.

Armitage Mfg. Co., Richmond, Va.

Birchy, Chas. & R. O., Atlanta, Ga.

Carolina Portland Cement Co., Charleston, S. C.

Chicago House Wrecking Co., Chicago, Ill.

Southeastern Lime & Cement Co., Charleston, S. C.

Southern Building Material Co., Norfolk, Va.

Southern Steel Producta Co., Inc., Richmond, Va.

Burlap-Inserted Roofing and Siding. (Flex-ible Cement.) Bermingham & Seaman Co., Chicago, Ill.

Burners. (Oil.) [See Fuel Oil Equipments.] Bushings. (Oilless. for Loose Pulleys.) North Amer. Metaline Co., Long Island City, N. Y. Cables.

Capies.

American Steel & Wire Co., Chicago, Ill.
Broderick & Bascom Rope Co., St. Louis, Mo.,
Roebling's Sons Co., John A., Trenton, N. J.
Williamsport Wire Rope Co., Williamsport, Pa.

Cableways. (Overhead Suspension.) Broderick & Bascom Rope Co., St. Louis, Mo. Flory Mfg. Co., S., Banger, Pa., Lidgerwood Mfg. Co., New York, N. Y., Mead-Morrison Mfg. Co., Cambridgeport, Mass. Roebling's Sons Co., John A., Trenton, N. J.

Can and Box Making Machinery. (Tin.) Bliss Co., H. W., Brooklyn, N. Y.

Cans. New Orleans Rfg. & Metal Wks., New Orleans, La. Southern Can Co., Baltimore, Md. United States Can Co., Cincinnati, O.

Canning Machinery and Supplies. nmers & Packers' Supply Co., Baltimore, Mobins & Co., A. K., Baltimore, Md., Baltimore, Md., Baltimore, Md., Baltimore, Md., Calledge, Ill., Rague Canning Machinery Co., Chicago, Ill.

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North Barris Wolf

Carborundum Paper and Cloth.

Card Clothing.

Card Clothing.

American Supply Co., Providence, R. I.

Cars. (Dump, Industrial Logging and Mine)

Austin Mfg. Co., Chicago, Ill.

Buldwin Equipment & Supply Co., Chicago, Ill.

Chinse Fdiry. & Mfg. Co., Columbus, O.

Electric Wheel Co., Quincy, Ill.

Georgia Car & Locomotive Co., Atlanta, Ga.

Hunt Co., C. W., West New Brighton, N. Y.

Males Co., The, Cincinnati, O.

Oliver Mfg. Co., Wm. J., Knoxville, Tran.

Raleigh Iron Works Co., Raleigh, N. G.

Union Iron Works, Selma, Ala.

Cars. (Passenger and Freight.) (See Railroad Equipment and Supplies.)

Car Couplers and Knuckles. Safety Car H't'g & L'ght'g Co., New York, N. 1

Car Lighting and Heating.

afety Car H't'g & L'ght'g Co., New York, M. Y.

Car Wheels, Axles and Trucks. rrnegle Steel Co., Pittsburg, Pa. Iver Mfg. Co., Wm. J., Knoxville, Tenn. Ilon Iron Works, Selma, Ala.

Casters.

Castings. (Aluminum.) Aluminum Company of America, Pittsburg, Pg. Gilbert & Sons Brass Fdry, Co., A., St. Louis, Ma.

Castings. (Brass and Bronze.) Gilbert & Sons Brass Fdry, Co., A., St. Lo Phosphor-Bronze Smelting Co., Philin., Pa Richmond Machine Works, Inc., Richmon Stratton & Bragg Co., Petersburg, Va.

Stratton & Bragg Co., Petersburg, Va.

Castings. (Iron, Gray, etc.)

Columbian Iron Works, Chattanooga, Tenn.

Gibbes Machinery Co., Columbia, S. C.,

Georgia Car & Locomotive Co., Atlanta, Ga.,

Glamorgan Pipe & Foundry Co., Lynchburg, Va.,

McWane Pipe Works, Lynchburg, Va.,

Poole Engineering & Machine Co., Bultimore, M.,

Raquette Foundry & Supply Co., Massena, N. T.,

Roanoke Iron Works, Inc., Roanoke, Va.,

Robins Conveying Belt Co., New York, N. Y.,

Ross-Needan Foundry Co., Chattanooga, Tenn.

Stratton & Bragg Co., Petersburg, Va.,

Valk & Murdock Iron Works, Charleston, & G.

Westbrook Elevator Co., Danville, Va.,

Castings. (Malleable Iron and Steel.)

Castings. (Malleable Iron and Steel.) Dayton Malleable Iron Co., Dayton, O. Missouri Malleable Iron Co., East St. Louis, Ill.

Castings. (Steel.)
Crucible Steel Castings Co., Lansdowne, Pa.,
Hoffman & Co., R. C., Baitimore, Md.
Reliance Steel Casting Co., Pittsburg, Pa.
Riverside Steel Casting Co., Newark, N. J.

Ceilings. (Metal.)

Edwards Manufacturing Co., Cincinnati, O. Keighley Metal Ceil. & Mfg. Co., S. Pittsburg, Pa. Milwaukee Corrugating Co., Milwaukee, Wis. Cement.

Cement.

Alpha Portland Cement Co., Enston, Pa. American Cement Co., Philadelphia, Pa. Carolina Portland Gement Co., Churleston, 8. C. Carolina Portland Gement Co., Churleston, 8. C. Clinchfield Portland Gem. Corp., Kingsport, Teaa. Dixie Portland Cement Co., Chuttanooga, Tean. Hartrantt Cement Co., Wm. G., Philadelphia, Pa. Ironton Portland Cement Co., Ironton, O. Kirkpatrick Sand & Cem. Co., Birmingham, Als. Kosmos Portland Cement Co., Louisville, Ky. Lebligh Portland Cement Co., Atlanta, Ga. Security Cement & Lime Co., Baltimore, Md. Southens States Portland Cem. Co., Charleston, 8. Couthern States Portland Cem. Co., Charleston, 8. C. Southern States Portland Cem. Co., Chockmart, Ga. Standard Portland Gement Co., Leeds, Alz. Tidewater Portland Cement Co., Baltimore, Md. Cement. (Liquids.)

Cement. (Liquids.) Glidden Varnish Co., Cleveland, O.

Cement Machinery.

Alsing Engineering Co., J. R., New York, N. T.

Power & Mining Machinery Co., Cudsby, Wis.

Raymond Bros. Impact Pulv. Co., Chicago, ill.

Chain Blocks.

ord Chain Block & Mfg. Co., Philadelphia, Pa. Chains. (Dredge, Quarry, Steam Shovel.)

Channelers. Ingersoll-Rand Co., New York, N. Y.

Checks. (Factory, Time and Merchandlee.) American Railway Supply Co., New York, N. Y.

Chemical and Drug Machinery. Chemists.

Davis, Geo. C., Philadelphia, Pa. Froehling & Robertson, Richmond, Va. McKenna, Dr. Chas. F., New York, N. Y.

Chimneys. (Steel-Concrete.) Teber Chimney Co., Chicago, Ill. Chloride Accumulator. Electric Storage Battery Co., The, Phila., Pa.

Chucks.

lorse Twist Drill & Mch. Co., New Bedford, Mass.

Cities and Towns. (Commercial and Industrial Opportunities.) [See Industrial, Agricultural and Commercial Opportunities.]

Clayworking Machinery. [See Brick and Clayworking Mchy. and Supplies.]

Cleansing Compound. (Floor din Alkali Works, Boston, Mass.

Clocks. (Electro-Self-Winding. Electro-Clock Co., Baltimore, Md.

Clocks. (Watchman.) oltzer-Cabot Electric Co., Boston, Mass.

Clutches. Dodge Manufacturing Co., Mishawaka, Ind. Positive Clutch & Pulley Works, Buffialo, N. Y.

Coal.

Coal.

Alabama Con. Coal & Iron Co., Birmingham, Ala

Clinchifield Coal Corp., Spartanburg, S. C.

Clinchifield Fuel Co., Spartanburg, S. C.

Consolidated Coal Co., Inc., New York, N. Y.

Flat Top Fuel Co., Bluefield, W. Vu.

Hammond-Byrd Co., Birmingham, Ala.

Tennessee Coal, Iron & R. R. Co., B'mgh'm, Ala.

Yolande Coal & Coke Co., Birmingham, Ala.

pplies. Baltimore, Ma. Md. d. Chicago, III.

R. I. ging and Mine) Chicago, III. tlanta, Ga. hton, N. Y.

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. Conn.

ittsburg, Pa. St. Louis, Mo. St. Louis, Mo. a., Pa. chmond, Va.

C. Tenn.
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methburg, Va.
Va.
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ssena, N. Y.
Va.
rk, N. Y.
soga, Tenn.
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v York, N. Y.
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Louis, Ill.

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igkiernan-Terry Drill Co., New York, N. Y.
Caal Handling Machinery.
Bartlett & Snow Co., C. O., Cleveland, O.
Brown Holstling Melky Co., Cleveland, O.
Brown Holstling Melky Co., Cleveland, U.
Bryward Co., New York, N. Y.
Biast Co., O. W., West New Brighton, N. Y.
Jefrey Mrg. Co. Columbus Brighton, N. Y.
Jefrey Mrg. Co. Columbus Condelphia), Pa.
Baddistrinon Mrg. Co., Cambridgeport, Mass.
Robins Conveying Belt Co., New York, N. Y.
Williams Co., The G. H., Cleveland, O. Coel Tar and By-Products.

Barrett Mfg. Co., Philadelphia, Pa.
Carolina Portland Cement Co., Charleston, S. C. Coke.

Ceal Cutters.
Ingeredil-Rand Co., New York, N. Y.
Jeffrey Mfg. Co., Columbus, O.
Jeffrey Lander, Co., Columbus, O.
Jekklernan-Terry Drill Co., New York, N. Y.

Coke.

Alabama Con. Coal & Iron Co.. Birmingham, Ala.
Fist Top Fuel Co., Bluedeld, W. Va.
Blekma, William & C. Cilhengo, III.
Blogers, Lovin & C. C., Chr.
Pagerses Coal, Iron & R. R. Co., D.
Tenscese Coal, Iron & R. R. Co., B'mgh'm, Ala.
Tolande Coal & Coke Co., Birmingham, Ala. Collapsible Steel Forms. (For Concrete Work.)

Concrete Construction.(Steel Reinforcement.) Cencrete Construction. (Sieel ReInforcement. American Steel & Wire Co., Chicago, Ill. American System of Reinforcing, Chicago, Ill. Brown Holsting Machinery Co., Cleveland, O. Omcrete-Steel Co., The, New York, N. Y. Omcrete Steel Engineering Co., New York, N. Y. Omcrete Pile Co., New York, N. Y. Reichert Mfg. Co., Columbus, O. Steel Mrg. Co., Millwankee, Wis. Speahan, Thomas, Danylle, Va. Wight & Co., W. N., New York, N. Y.

Concrete Curb Protection. (Steel.)
| Steel | Concrete Co., Philadelphia, Pa. Concrete Dams.

mbursen Hydraulic Const. Co., Boston, Mass.

Concrete Floor Dressing. (Waterproof.)

Concrete Forms. (Metal.) laichert Mfg. Co., Milwaukee, Wis. Concrete Forms. (Steel Collapsible.)
Concrete Form & Engine Co., Detroit, Mich. Concrete Mixers.

Cancrete Mixers.

Carolina Portland Cement Co., Charleston, S. C. Sareka Machine Co., Lansing, Mich.

Jeffer Mrg. Co., Columbus, O.

Saint Co., T. L., Chicago, Ill.

Standard Scale & Supply Co., Pittsburg, Pa.

Cancrete Reinforcing Bars.
Cancrete Steel Co., Pittsburg, Pa.
Cancrete Steel Co., Pittsburg, Pa.
Cancrete Steel Co., The, New York, N. Y.
Cancrete Steel Engineering Co., New York, N. Y.
Concrete Steel Engineering Co., New York, N. Y.
Cornected Steel Co., St. Louis, Mo.
Franklin Steel Co., Franklin, Pa. Condensers.

Condensers.

Alberger Condenser Co., New York, N. Y.

Dean Bros. Steam Pump Wks., Indianapolis, Ind.

Westinghouse Machine Co., Pittsburg, Pa.

Wheeler Condenser & Eng. Co., New York, N. Y.

Tork Mfg. Co., York, Pa.

Conductor Pipe. Edwards Mfg. Co., Cincinnati, O. Hussey & Co., C. G., Pittsburg, Pa. Milwaukee Corrugating Co., Milwaukee, Wis.

Hausey & Co., C. G., Fricaburg, F. B.
Hausey & Co., C. G., Fricaburg, F. B.
Hause & Corrugating Co., Milwaukee, Wis.

Contractors' Machinery and Supplies. [See Holsting Machinery.]

American Locomotive Co., New York, N. Y.

Austin Mrg. Co., Chicago, Hil.
Case Threshing Mch. Co., J. I., Racine, Wis.

Odye Iron Works, Duluth, Minn.

Odye Iron Works, Duluth, Minn.

Odye Iron Works, Duluth, Minn.

Ploy Mrg. Co., S., Bangor, Pa.

Ryde Bros. & Co., New York, N. Y.

Inton, W. J., New York, N. Y.

Linton, W. J., New York, N. Y.

Linton, W. J., New York, N. Y.

Linton, W. J., Rey York, N. Y.

Marjand Equipm't & Supply Co., Baltimore, Md.

Med-Morrison Mrg. Co., Cambridgeport, Misso.

Moughan Mch. Co., Chicago, Hi.

Oliver Mrg. Co., Wm. J. Knoxville, Tenn.

Own Bucket Co., Clevella, P.

Robbs Conveying Belt Co., New York, N. Y.

Williamson Bros. Co., Philadelphia, Pa.

Conveying Machinery.

Williamon Bros. Co., Philadelphia, Ps.
Conveying Machinery.
Bardist & Snow Co., C. O., Cleveland, O.
Brown Holsting Mchy. Co., Cleveland, O.
Brown Holsting Mchy. Co., Cleveland, O.
Caldwell & Son Co., H. W., Chicago, III.
Dedge Manufacturing Co., Mishawaka, Ind.
Tiory Mfg. Co., S., Bangor, Ps.
Bayward Co., New York, N. Y.
Harry Mfg. Co., Columbus, O.
Hegrewood Mfg. Co., New York, N. Y.
Lisk-Belt Co., Nicetown (Philadelphia), Ps.
Mad-Morrison Mfg. Co., Cambridgeport, Mass,
McLanahan-Stone Mach. Co., Hoilldaysburg,
McLanahan-Stone Mach. Co., Hoilldaysburg,
McLanahan-Stone, Milwaukee, Wis.

Cooling Towers.

Alberger Condenser Co., New York, N. Y.
Wheeler Condenser & Eng. Co., New York, N. Y.

rd, Mass.

dustrial

American Mfg. Co., New York, N. Y.

Roderick & Bascom Rope Co., St. Louis, Mo.

Columbian Rope Co., Auburn, N.

Plymouth Cordage Co., North Plymouth, Mass.

Tamer Co., J. Spencer, New York, N. Y.

Waitlock Cordage Co., New York, N. Y.

Cerdage Machinery. askell-Dawes Machine Co., Boston, Mass.

Cern-Mill Machinery.

Kectyke & Marmon Co., Indianapolis, Ind.

Raymond Bros. Impact Pulv. Co., Chicago, Ill.

Blar Co., B. F., Baltimore, Md.

Wolf Co., Chambersburg, Pa.

Cotton Duck. arner Co., J. Spencer, New York, N. Y. Cetten Oil and Products.
American Cotton Oil Co., New York, N. Y.

Cetten Yarns. (Commission Merchants.)

Cotton-Gin Machinery.
Carrer Cotton Gin Co., East Bridgewater, Mass.
Carrer Cotton Gin Co., Birmingham, Ala.
Gibber Machinery Co., Columbia, S. C.
Van Winkie Gin & Machine Co., Atlanta, Ga.

Cotton-Mill Machinery.

American Mach. & Mfg. Co., Charlotte, N. C.,
American Supply Co., Providence, R. I.,
Draper Co., Hopedale, Mass.,
Kitson Machine Shop, Lowell, Mass.,
Kitson Machine Shop, Lowell, Mass.,
Mason Machine Works, Taunton, Mass.,
Saco-Pettee Co., Newton Upper Falls, Mass.,
Whithin Machine Works, Whithinsville, Mass.,
Whithin Machine Works, Whithinsville, Mass.,
Cotton-Mill Supplies.

Cotton-Mill Supplies.

American Supply Co., Providence, R. I. Whitinsville Spin'g Ring Co., Whitinsville, Mass.

Whitinsville Spin'g Ring Co., Whitinsville, Mani
Cottonseed-Oil Machinery.
Buckeye Iron & Brass Works, Dayton, O.
Burruss Engineering Co., Atlanta, Ga.
Callahan Co., W. P., The, Dayton, O.
Cardwell Machine Co., Richmond, Va.
Carver Cotton Gin Co., East Bridgewater, Mass
Continental Gin Co., Birmingham, Ala.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Van Winkle Gin & Machine Co., Atlanta, Ga. ater, Mass.

Van Winkie Gin & Machine Co., Adams, Couplings.

American Spiral Pipe Works, Chicago, Ill. Caldwell Co., Inc., W. E., Louisville, Ky. Dodge Manufacturing Co., Mishawaka, Ind. Goldens Foundry & Machine Co., Columbus, Ga. Sinchir-Scott Co., Balfimore, Md.
Wood's Sons, T. B., Chambersburg, Pa.

Couplings. (Car.) Couplings. (Hose, Air, Gas. Steam and Water.) National Tube Co., Pittsburg, Pa.

Covering. (Pipe, Boiler, etc.) urolina Portland Cement Co., Charleston, S. C. hins-Manville Co., II. W., New York, N. Y., uthern Pipe Covering Co., Inc., Richmond, Va.

Cranes. (Locomotive.)
Brown Holsting Machinery Co., Cleveland, O.
Browning Englueering Co., Cleveland, O.
Exeter Machine Works, Pittston, Fa.

Cranes. (Traveling, Hand, Power, Hydraulic.)
Brown Holsting Machinery Co., Cleveland, O.
Hayward Co., New York, N. Y.
Lane Mfg, Co., Montpeller, Vt.
Northern Engineering Works, Detroit, Mich.
Speidel, J. G., Reading, Pa.

Crayons. owell Crayon Co., Lowell Mass.

Creosote.
Carolina Portland Cement Co., Charleston, S. C. Creosote Oil.
Atlantic Turpentine & Reflu'g Co., Savannah, Ga.

Creosoted Wood Block. (Contractors for soted Wood Block Paving Co., Gulfport, Miss.

Creosoting Works.

Creosoting Works.

Gulfport Creosoting Co., Gulfport, Miss.
Gulfport Creosoting Co., Gulveston, Tex.
National Lumber & Grees. Co., Texarkans, Ark.
Southern Creosoting Co., Ltd., Slidell, La.
Southern Wood Preserving Co., Atlanta, Ga.

Crossarms and Pins. Internat'l Creosot'g & Cons. Co., Galveston, Tex. Southern Creosoting Co., Ltd., Slidell, La. Western Electric Co., New York, N. Y.

Crossings. [See Railroad Frogs and Switches.]

Crosstie Machine. andard Cross Tie Mch. Co., New Orleans, La. Crossties.

Internat'l Cresot'g & Cons. Co., Galveston, Tex. National Lumber & Creos. Co., Texarkana, Ark. Naylor & Co., S. E., Gulfport, Miss. Southern Creosoting Co., Ltd., Slidell, La.

Crossties. (Steel.) Carnegie Steel Co., Pittsburg, Pa.

Crushers. (Corn and Cob.)
Gardner Crusher Co., New York, N. Y.
Jeffrey Mfg. Co., Columbus, O.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Williams Pat. Crusher & Pulv. Co., Chicago, Ill.

Crushers. (Rock.)

Austin Mrg. Co., Chicago, III.
Case Threshing Mach. Co., J. I., Racine, Wis.
Gardner Crusher Co., New York, N. Y.
Leiligh Crusher Co., New York, N. Y.
Leiligh Crusher Co., Ltd., Philadelphia, Pa.
Power & Mining Machinery Co., Cudaby, Wis.
Raymond Bros. Impact Pulv. Co., Chicago, III.
Smith Co., T. L., Chicago, III.
Symons Bros., Milwaukee, Wis.
Universal Road Mchy. Co., Kingston, N. Y.

Crushing and Pulverizing Machinery. Crushing and Pulverizing Machinery.

Alsing Engineering Co., J. R., New York, N. Y.

Austin Mfg. Co., Chicago, III.

Bartlett & Snow Co., C. O., Cleveland, O.

Gardner Crusher Co., New York, N. Y.

Jeffrey Mfg. Co., Columbua, O.

Leligh Crusher Co., Ltd., Philadelphia, Pa.

McLanahan-Stone Mach. Co., Hollidaysburg, Pa.

Praver & Mining Machinery Co., Cudaby, Wis.

Pratt Engineering & Mach. Co., Atlanta, Ga.

Raymond Bros. Impact Pulv. Co., Chicago, III.

Symons Bros., Milwaukee, Wis.

Walker & Elliott, Wilmington, Del.

Williams Pat. Crusher & Pulv. Co., Chicago, III.

Culverts. (Corrugated Metal.) Culverts. (Corrugated Metal.)
American Rolling Mill Co., Middletown, O.
Canton Culvert Co., The. Canton, O.
Dixie Culvert & Metal Co., Atlanta, Ga.
Kentucky Culvert Mg. Co., Buechel, Ky.
New Orleans Rfg. & Metal Wks., New Orleans. La.
North Carolina Metal Culv. Co., Greensboro, N. C.
Roanoke Bridge Co., Roanoke, Va.
Tennessee Metal Culvert Co., Nashville, Tenn.
Virginia Metal Culvert Co., Roanoke, Va.

Culverts. (Vitrified Pipe.) Stevens Sons Co., H., Macon, Ga.

Cupola Furnaces.

Northern Engineering Works, Detroit, Mich.
Paxson Co., J. W., Philadelphia, Pa.
Petroleum Iron Works Co., Sharon, Pa.

Cuts. (Half-tone, Line, etc.) altimore Maryland Envg. Co., Baltimore, Md.

Cutter Heads. (Woodworking.) himer & Sons, Samuel J., Milton, Pa.

Cutter Grinders.

Abrasive Material Co., Philadelphia, Pa.
Vitrified Wheel Co., Westfield, Mass. Dams. (Reinforced Concrete.)

Ambursen Hydraulic Const. Co., Boston, Mass. Derricks and Derrick Fittings.
American Holat & Derrick Co., St. Paul, Minn.
Monighan Machine Co., Chicago, III.
National Holating Engine Co., Harrison, N. J. Designers and illustrators. (Printed Matter. altimore Maryland Envg. Co., Baltimore, Md.

Die Makers. (Special.) lack & Decker Mfg. Co., Baltimore, Md.

Disinfectant.

Solar Chemical Co., Washington, D. C.

Ditching Machinery.
Anerican Hoist & Derrick Co., St. Paul, Minn.
American Locomotive Co., New Yorl, N. Y.
American Steel Bredge Co., Ft. Wayne, Ind.
Browning Mfg. Co., Mansfeld, O.
Fairbanks Steam Shovel Co., Marion, O.
Hayward Co., The, New York, N. Y.
Marion Steam Shovel Co., Marion, O.
Monighan Machine Co., Chicago, Ill.
Owen Bucket Co., Cleveland, O.
Williams Co., The G. H., Cleveland, O.

Williams Co., The G. H., Cleveland, G.

Docks. (Concrete.)

Carolius Portland Cement Co., Charleston, S. C.

Raymond Concrete Pile Co., New York, N. Y.

Doors. (Birch Veneered.)

Massee & Felton Lumber Co., Macon, Ga.

Doors. (Steel Rolling.)
Kinnear Mfg. Co., Columbus, O.
Doors. (Tin Clad.)
Victor Mfg. Co., Newburyport, Mass.

Doors, Partitions. (Metallic.)
Dabistrom Metallic Door Co., Jamestown, N. Y.

Doors, Sash and Blinds. Columbus Iron Works Co., Columbus, Ga. Massee & Felton Lumber Co., Macon, Ga.

Draftsmen's Supplies. Keuffel & Esser, Hoboken, N. J.

Dredge Chains.

Dredges. [See Excavating Machinery.] Drills. (Pneumatic.) [See also Drills, Rock and Mining.]

Drills. (Prospecting.)

Fort Wayne Electric Works, Port Wayne, Ind. Ingersoil-Hand Co., New York, N. Y. Keystone Steam Well Mach. Co., Beaver Falls, Pa. McKiernan-Terry Drill Co., New York, N. Y.

Drills. (Rock and Mining.)
Chicago Pueumatic Tool Co., Chicago, Ill.
Fort Wayne Electric Works, Fort Wayne, Ind.
Independent Pueumatic Tool Co., Chicago, Ill.
Ingersoll-Rand Co., New York, N. Y.
Jeffrey Mg. Co., Columbus, O.
McKiernan-Terry Drill Co., New York, N. Y.

Drills. (Twist.)

Manning, Maxwell & Moore, Inc., New York, N. Y. Morse Twist Drill & Mch. Co., New Bedford, Mass.

Drive Well Points and Well Supplies. atlonal Tube Co., Pittsburg, Pa.

Drop Forgings.
American Spiral Pipe Works, Chicago, III.
Great Southern Automobile Co., Birmingham, Ala.
Richmond Forgings Corporation, Richmond, Va.

Drop Forging Machinery. Bliss Co., E. W., Brooklyn, N. Y.

Drying Machinery.

American Blower Co., Detroit, Mich.
American Process Co., New York, N. Y.
Bafley-Lebby Co., The, Charleston, S. C.
Buffalo Forge Co., Buffalo, N. Y.
Ruggles-Coles Engineering Co., New York, N. Y.
Sturtevant Co., B. F., Hyde Park, Mass.

Dryklins.

Buffalo Forge Co., Buffalo, N. Y. Hollister-Whitney Co., Quincy, Ill. Sturtevant Co., B. F., Hyde Park, Mass. Union Iron Works Co., Selma, Ala.

Dumbwaiters. ildney Elevator & Mfg. Co., Sidney, O. peidel, J. G., Reading, Pa.

Dump Wagons and Wagon Boxes. Case Threshing Mach. Co., J. I., Racine, Wis. Eagle Wagon Works, Auburn, N. Y., Troy Wagon Works Co., Troy, O. Dust-Collecting Systems.

Buffalo Forge Co., Buffalo, N. Y.
Savannah Blow Pipe Co., Savannah, Ga.
Skinter Bros., St. Louis, Mo.
Skinth Roofing Co., Wilmington, N. C.
Standard Blower & Metal Mfg. Co., Atlanta, Ga.

du Pont-de Nemours Powder Co., E. I., Wilming-ton, Del.

Dynamos and Motors. (Steam Turbine.) Dynamos and Motors. (Steam Turbine.)
De Laval Steam Turbine Co., Trenton, N. J.
Emerson Steam Pump Co., Alexandria, Va.
Fort Wayne Electric Works, Ft. Wayne, Ind.
General Electric Co., Schenectady, N. Y.
Southwark Fdry. & Mch. Co., Philadelphia, Pa.
Terry Steam Turbine Co., New York, N. Y.
Wagner Electric Mg. Co., St. Louis, Mo.
Western Electric Co., New York, N. Y.
Western Electric Co., New York, N. Y.
Westinghouse Elect. & Mfg. Co., Pittaburg, Pa.

Eaves. (Trough.) Edwards Mfg. Co., Cincinnati, O. Hussey & Co., C. G., Pittsburg, Ps. Milwaukee Corrugating Co., Milwaukee, Wis.

Ejectors. (Automatic Sewage.) Blaisdell Machinery Co., Bradford, Pa.

Electric Machinery. (Dynamos, Generators,

Electric Machinery. (Dynamos, Generators, Motors, etc.)

Allis-Chalmers Co., Milwaukee, Wis. American Engine Co., Bound Brook, N. J. American Machine Co., Louisville, Ky. Crocker-Wieeler Co., Ampere, N. J. Doubleday-Hill Electric Co., Pittsburg, Pa. Engberr's Elect. & Mech. Works, St. Joseph, Mo. Fairbanks, Morse & Co., Chicago, Ill. Fort Wayne Electric Works, Ft. Wayne, Ind. General Electric Co., Schenectady, N. Y. Gregory Electric Co., Chicago, Ill. X. Lee Electric Co., Chicago, Ill. Kentucky Electrical Co., Owensboro, Ky. Lee Electric Co., Baltimore, Md. Miller-Owen Elec. Co., Pittsburg, Pa. Piedmont Electric Co., Asheville, N. O. Ridgway Dynamo & Engine Co., Ridgway, Pa. Robbins & Myers Co., Springfield, O. Southwark Fdry, & Mch. Co., Philadelphia, Pa. Sturtevant Co., B. F., Hyde Park, Mass. Triumph Electric Mrs. Co., St. Louis, Mo. Westinghouse Elect. & Mfg. Co., Pittsburg, Pa.

Electrical Contractors, Instruments and Supplies.

American Mach. & Mfg. Co., Charlotte, N. C. Carolina Electrical Co., Raleigh, N. C. Crocker-Wheeler Co., Ampere, N. J. Doubleday-Hill Electric Co., Pittsburg, Pa. Engberg's Elect. & Mech. Works, St. Joseph, Mo. Fort Wayne, Hill Electric Co., Pittsburg, Pa. Engberg's Elect. & Mech. Works, St. Joseph, Mo. Fort Wayne, Electric Works, Ft. Wayne, Ind. General Electric Co., Chicago, Hi. Y. Gregory Electric Co., Chicago, Hi. Y. Kentucky Electric Co., Chicago, Hi. Y. Kentucky Electric Co., Guise, Chicago, Hi. Y. Lee Electric Co., Baltimore, Md. Levy, Deronda, Columbus, Ga. Piedmont Electric Co., Asheville, N. C. Robbins & Myers Co., Springfield, O. Wagner Electric Mfg. Co., St. Louis, Mo. Westinghouse Elec. & Mfg. Co., Pittsburg, Pa. Electro Magnet. [See Magnet Electro.]

Electro Magnet. [See Magnet Electro.]

Elevating, Conveying and Power Transmission Machinery. [See also Conveying Mely, and Power Transmission Mely.]

Jeffrey Mfg. Co., Columbus, O.

Jeffrey Mfg. Co., Commons, S.,

Elevators.
American Machine Co., Louisville, Ky.,
Curran Elevator Co., James H., Cinchmati, O.,
Dodge Manufacturing Co., Mishawaka, Ind.,
Hollister-Whitney Co., Quincy, III.
Kansas City Flevator Mfg. Co., Kansas City, Mo.,
Moffatt Machinery Mfg. Co., Charlotte, N. C.,
Olio Elevator & Machine Co., Columbus, O.,
Otis Elevator & Mrg. Co., Sidney, O.,
Sidney Elevator & Mfg. Co., Sidney, O.,
Speidel, J. G., Reading, Pa.,
Westbrook Elevator Co., Danville, Va.

Elevator Safety Appliance. oth Elevator Safety Co., Inc., Baltimore, Md.

Elevator Buckets.
Caldwell & Son Co., H. W., Chicago, Ill.
Jeffrey Mfg. Co., Columbus, O.
Link-Belt Co., Philadelphia, Pa.

Elevator Enclosures and Cabs.

Bolles Iron & Wire Works, J. E., Detroit, Mich.
Cincinnati Mfg. Co., Cincinnati, O.
Dow Wire Works, Louisville, Kr.,
Dufur & Co., Baltimore, Md.
Dufur, Bagott & Co., Baltimore, Md.
Jones & Co., L. E., Baltimore, Md.
Meyers Mfg. Co., The Fred J., Hamilton, O.
Ohio Elevator & Machine Co., The, Columbus, O.
Ohio Elevator & Machine Co., The, Columbus, O.
Ohio Elevator Co., New York, N.,
Southern Wire & Iron Mfg. Co., Dallas, Tex.

Elevator Rome, [See Wire Rome]

Elevator Rope. [See Wire Rope.] Elevator Safety Gates.

Emery Wheels. [See Grinding Wheels.]

Engineers—
COMBUSTION.
Improved Equipment Co., New York, N. Y. Improved Equipment Co., New York, N. Y.

CONSULTING.

Angle, Geo, W., New York, N. Y.

Jaudon Engineering Co., H. S., Savannah, Ga.

Lewis, Fred H., Birmingham, Ala.

Lide, Martin J., Birmingham, Ala.

Macfarren, S. J., Washington, D. C.

Serivenor, Arthur, Richmond, Va.

Young, W. W., New York, N. Y.

Scrivenor, Arthur, Richmond, Va.
Young, W. W., New York, N. Y.
Young, W. W., New York, N. Y.
Young, W. W., New York, N. Y.
Poster-Orner-Constructing.
Drum & Co., A. L., Chicago, III.
Foster-Oreighton-Gould Co., Nashville, Tenn.
Harlow Co., James H., Bultimore, Md.
Harlow Co., James H., Bultimore, Md.
Jaudon Engineering Co., H. S., Sannab, Ga.
Summers & Co., L. L., Chicago, III.
Webr, Walden & Dukehart, Bultimore, Md.
White & Co., J. G., New York, N. Y.
DESIGNING, COSSTRUCTING, POWER PLANTS,
ETC.
Dodge, Day & Zimmerman, Philadelphia, Pa.
Drum & Co., A. L., Chicago, III.
Emory & Eisenbrey, Philadelphia, Pa.
Lea, Henry I., Chicago, III.
Lea, Henry I., Chicago, III.
Lea, Henry I., Chicago, III.
Sirrine, J. E., Greenville, S. C.
Sohle, Edward, Charlotte, N. C.
Sohle, Edward, Charlotte, N. C.
Sylker, Wm. C., Atlanta, Ga.
Stevens, John A., Lowell, Mass.
Stevens, John A., Lowell, Mass.
Virginia Bridge & Fron Co., Roonoke, Va.
Whitfield, Geo, H., Richmond, Va.

DRAINAGE.

Morgan Engineering Co., Memphia, Tonn.

EFFICIENCY.

Macfarren, S. J., Washington, D. C.

Suffern & Son, Birmingham, Ala.

Suffern & S. Washington, D. C.
Suffern & Son, Birmingham, Ala.

ELECTRIC, CIVIL, ETC.

Arnold Co. The, Chicago, Ill.
Cothran & Cothran, Greenwood, S. C.
Crocker-Wheeler Co., Ampere, N. J.
Drum & Co., A. L., Chicago, Ill.
Drum & Co., A. L., Chicago, Ill.
Brum & Eisenbrey, Philadelphia, Pa.
Gloster, W. O., Manchester, Ky.
Kelholtz, F. O., Baltimore, Md.
Layman, E. F., Chnchnatt, O.
Layman, E. F., Chnchnatt, O.
Lawis, Fred H., Birmingham, Ala.
Lide, Martin J., Birmingham, Ala.
Lid

White & Co., J. G., New York, N. Y.
Whitleid, Geo. H., Bichmond, Va.

GAS.
Bartlett-Hayward Company, The, Baltimore, Md,
Lea, Henry I., Chicago, Ill.
GEOLOGICAL.

Clapp. Frederick G., Pittsburg, Pa.
Davis, Geo. C., Philadelphia, Pa.
Hydradelphia, Pa.
Hydradulic and Sewerage.
Burgwyn, C. P. E., Richmond, Va.
Hydradulic and Sewerage.
Burgwyn, C. P. E., Richmond, Va.
Purm & Co., A. L., Chicago, Ill.
Harlow Co., James H., Baltimore, Md.
Hatton, T. Chalkley, Wilmington, Del.
Manning-Hughes Co., Charlotte, N. C.
McCrary, Co., Inc., The J. B., Atlanta, Ga.
Myers, E. W., Greenaboro, N. O.
Pew, Arthur, Atlanta, Ga.
Shielda, W. S., Chicago, Ill.
Tucker & Laxton, Charlotte, N. C.
Webr, Walden & Dukebart, Baltimore, Md.
ICE AND REFRIGERATING.
Tait-Nordmeyer Eng. Co., St. Louis, Mo.
LANDSCAPE.

LANDSCAPE.
Reding & Howard, Baltimore, Md.

Reding & Howard, Baltimore, Md.
MINING.
Gloster, W. O., Manchester, Ky.
REINFORCED CONCRETE CONSTRUCTION, BUILDINGS, BRIDGES, ETC.
Concrete Steel Engineering Co., New York, N. Y.
Gardner & Howe, Memphis, Tenn.
Layman, E. F., Cincinnati, O.,
Raymond Construction Co., Washington, D. C.
WATEL-WORKS.
Burgwyn, C. P. E., Richmond, Va.,
Myers, E. W., Greensboro, N. O.,

Engines.

GAS AND GASOLINE.

Blaisdell Machinery Co., Bradford, Pa.

Bogart Gas Power Eng. Co., Buffalo, N. Y.

De La Vergne Machine Co., New York, N. Y.

Fairhanks, Morse & Co., Chicago, Ill.

Mietz, A., New York, N. Y.

Standard Gas Power Co., Atlanta, Ga.

Westinghouse Machine Co., The, Pittsburg, Pa.

OIL. Covington Mcb. Co., New York, N. Y. De La Vergne Machine Co., New York, N. Y. Mietz, A., New York, N. Y.

De La Vergne Machine Co., New York, N. Y.

Mietz, A., New York, N. Y.

Engines, (Steam.)

Alla-Chaimers Co., Milwaukee, Wis.

American Blower Co., Detroit, Mich.

American Blower Co., Detroit, Mich.

American Hoist & Derrick Co., St. Paul, Minn.

Ames Iron Works, Oswego, N. Y.

Atlas Engine Works, Indianapolis, Ind.

Ball Engine Co., Erie, Pa.

Brownell Co., The, Dayton, O.

Buffalo Forge Co., Buffalo, N. Y.

Cameron & Barkley Co., Charleston, S. C.

Chicago House Wrecking Co., Chicago, Ill.

Cooper Co., C. & G., Mt. Vernon, O.

Dake Engine Co., Grand Haven, Mich.

Engherg's Elect. & Mech. Works, St. Joseph, Mo.

Gibbes Machinery Co., Columbia, S. C.

Greenwald Co., I. & E., Cincinnati, O.

Griffith & Wedge Co., The, Zanesville, O.

Harrisburg Fdry. & Mach. Wks., Harrisburg, Pa.

Hooven, Owen, Rentschler Co., Hamilton, O.

Houston, Stanwood & Gamble Co., Cincinnati, O.

Leffel & Co., James, Springfield, O.

Lombard Iron Works, Augusta, Ga.

Mecklenburg Iron Works, Baldwinsville, N. Y.

Murray Iron Works Co., Burlington, Ia.

Phoenix Iron Works Co., Menville, Pa.

Price Machinery Co., S. M., Norfolk, Vs.

Purser, J. R., Charlotte, N. C.

Ridgway Dynamo & Engine Co., Ridgway, Pa.

Schoffeld's Sons Co., J. S., Macon, Ga.

Smith-Courtney Co., Bildwond, Vs.,

Butter Mig. Co., Milwaukee, Wis.

Viter Mig. Co., Milwaukee, Wis.

Westinghouse Machine Co., Pittsburg, Pa.

Engines. (Truck and Aeroplane.)

Engines. (Truck and Aeroplane.) Black & Decker Mfg. Co., Baitimore, Md.

Envelopes. Young & Selden Co., Baltimore, Md.

Excavating Machinery. (Steam Sho Excavating Machinery. (Steam Shovels, etc. American Hoist & Derrick Co., St. Paul, Minn. American Ecomotive Co., New York, N. Y. American Steel Dredge Co., Ft. Wayne, Ind Baidwin Equipment & Supply Co., Chicago, Ill. Browning Mig. Co., Mansheld, O. Bucyrus Co., The, So. Milwaukee, Wis. Fairbanks Steam Shovel Co., Marion, O. Hayward Co., New York, N. Y. Jeffrey Mig. Co., Columbus, O. Lidgerwood Mig. Co., New York, N. Y. Malee Co., Clincinnati, O. Marion, O. Monighan Machine Co., Chicago, Ill. Owen Bucket Co., Cleveland, O. Williams Co., The G. H., Cleveland, O. Williams Co., The G. H., Cleveland, O.

Excelsior Machinery. line, Lewis T., Alpeta, Mich.

Exhaust Heads.

Abendroth & Root Mfg. Co., Newburgh, N. X.

American Spiral Pipe Works, Chicago, Ill.

Greenwald Co., I. & E., Cincinnati, O.

Hoppes Mfg. Co., Springfield, O. Exhibits. (Machinery Builders' Equipment and Supplies.)

Bourse, The, Philadelphia, Pa. Builders' Exchange, Baltimore, Md.

Expansion Joints. Alberger Condenser Co., New York, N. Y. Badger & Sons Co., E. B., Boston, Mass.

Explosives.
du Pont-de Nemours Powder Co., E. I., Wilmington, Del.

Factory Sites. (Town and Rallroad.) [See Industrial, Agricultural and Commercial Opportunities.]

Fans. (Electric.)
Doubleday-Hill Electric Co., Pittsburg, Pa.
General Electric Co., Schenectady, N. Y.
Robbins & Myers Co., Springdeld, N. Weatern Electric Co., New York, N. Y.
Weatingbones Elec. & Mfg. Co., Pittsburg, Pa.

Fans. (Ventilating.) [See Blowers, Exhaust

Fastener Driving Machine. (Corrugated Joint.) Saranac Machine Co., St. Joseph, Mich.

Feed-Water Heaters and Purifiers.

Feed-Water Heaters and Purifiers.
Alberger Condenser Co., New York, N. Y.
American Water Softener Co., Philadelphia, Pa.
Blake & Knowles Steam Pump Works, New
York, N. Y.
Brownell Co., Dayton, O.
Exeter Machine Works, Pittston, Pa.
Gibbes Machinery Co., Columbia, S. C.
Greenwald Co., I. & E., Cincinnati, O.
Hoppes Mfg. Co., Springdeld, O.
McAdoo, Thomas, Philadelphia, Pa.
Murray Iron Works Co., Burlington, Is.
National Pipe Bending Co., New Haven, Conn.
Scaffe & Sons Co., Win. B., Pittsburg, Pa.
Stewart Heater Co., Buffalo, N. Y.
Wheeler Condenser & Eng. Co., New York, N. Y.

Feed-Water Heater and Purifler and Oil Separator Combined.

Blake & Knowles Steam Pump Works, New York, N. Y. Stewart Heater Co., Brffalo, N. Y.

Feit. (Building, Sheathing.) arrett Mfg. Co., Philadelphia, Pa.

Fencing, Entrance Gates. (Iron, Steel, Wire.)
American Steel & Wire Co., Chicago, Ill.
Bolles Iron & Wire Works, J. E., Detroit, Mich.
Dow Wire Works, Louisville, Ky.
Dufur & Co., Baltimore, Md.
New Jecusey Wire Cloth Co., Trenton, N. J.
Ohio Elevator & Mach. Co., The, Columbus, O.

Pertilizer Machy. [See also Phosphate Mchy.]
ampbell. P. F., Philadelphia, Pa.
alk & Murdock Iron Works, Charleston, S. C.
'alker & Elliott, Wilmington, Del.
'limington Iron Works, Wilmington, N. C.

Flies.

Barnett Co., G. & H., Philadelphia, Pa.
Delta Flie Works, Philadelphia, Pa.
Nicholson File Co., Providence, R. I.

Filters. (Water, for Domestic and Inc.

Purposes.)

American Water Softener Co., Philadelphia, Pa.
International Filter Co., Chicago, Ill.
Lynn-Superior Co., The, Clinchmati, O.,
New York Con. Jewell Fill. Co., New York, N. Y.
Roberts Filter Mfg. Co., Philadelphia, Pa.,
Scalfe & Sons Co., Wm. B., Pittaburg, Pa.
Tucker & Laxton, Charlotte, N. C.

Fire Clay Brick. [See Brick, Fire Clay.] Fire Box Blocks. Ashland Fire Brick Co., Ashland, Ky.

Fire Door Fixtures. Peters & Son. Jas., Philadelphia, Pa. Victor Mfg. Co., Newburyport, Mass.

Fire Extinguishers.

adger & Sons Co., E. B., Boston, Mass.
eneral Fire Extinguisher Co., Providence, R. I.

General Fire Extinguished Co., a North Chespeak, Bolles Iron & Wire Works, J. E., Detroit, Mich. Chesspeake Iron Works, Baltimore, Md. Raquette Foundry & Supply Co. Massena, N. Y. Rounoke Iron Works, Inc., Roanoke, Va. Fire insurance. Hartford Fire insurance Co., Hartford, Conn.

Fireplaces. (Artistic Brick.) iske & Co., Inc., New York, N. Y.

Fireproof Building Construction. (Steel.)
[See Concrete Construction.] Fireproof Building Material Dahlstrom Metallic Door Co., Jamestown, N. Y. Johns-Manville Co., H. W., New York, N. Y.

Fireproof Doors and Shutters. Dalistrom Metallic Door Co., Jamestown, N. Y. Kinnear Mfg. Co., Columbus, O. New Orleans Roof & Metal Co., New Orleans, La. Richmond Safety Gate Co., Richmond, Ind. Victor Mfg. Co., Newburyport, Mass.

Fireproof Windows, [See Window Frames and Sashes (Fireproof),]

Fire Protection Hardware. eters & Son, Jas., Philadelphia, Pa.

Flanges. (Iron and Steel.) Flanges. (Iron and Steel.)
American Cast Iron Pipe Co. Birmingham, Aia,
American Pipe & Construction Co., Philia., Pa.
American Spiral Pipe Works, Cheago, Ill.
Cameron Steam Pump Weks., A. S., New York, N. Y.
Dart Manufacturing Co., E. M., Providence, R. I.
General Fire Extinguisher Co., Providence, R. I.
Glumorgan Pipe & Foundry Co., Lynchburg, Va.
McWane Pipe Works, Lynchburg, Va.
Mxtonal Tube Co., Pittsburg, Pa.
U. S. Cast Iron Pipe & Fdy, Co., New York, N. Y.
Whitlock Coll Pipe Co., Hartford, Conn.
Wood & Co., R. D., Philadelphia, Pa.

Flexible Joints.

Moran Flex. Steam Joint Co., Inc., Louisville, Ky.

Flooring. (Cement.)
Dagostin & Angelini Bros., Montgomery, Ala.

Flooring. (Hardwood, Maple, Oak.) Carolina Portland Cement Co., Charleston, S. C. Northeross Mantel Co., W. J., Memphils, Tenn. Nashville Hardw'd Flooring Co., Nashville, Tenn. Flour and Grist Mill Machinery and Supplies.

piles.
Caldwell & Sons Co., H. W., Chicago, Ill.
Glibbes Machinery Co., Columbia, S. C.
Nordyke & Marmon Co., Indianapolis, Ind.
Salem Foundry & Machine Works, Salem, Ya.
Starr Co., B. F., Baltimore, Md.
Veatch & Co., L. R., Louisville, Ky.
Wolf Co., Chambersburg, Pa.

Flushtank Regulator. odern Iron Works, Quincy, Ill.

Flushtanks-Merritt & Co., Camden, N. J.

Foot Valves. Cameron Steam Pump Wks., A. S., New York, N. Y.

Forges.
Buffalo Forge Co., Buffalo, N. Y.
Sturtevant Co., B. F., Høde Park, Mass. Forgings.

Forgings.

Great Southern Automobile Co., Birmingham, Ala
Richmond Forgings Corporation, Richmond, Va.
Weimer Chain & Iron Co., Lebanon, Pa.

Forms. (Steel Collapsible.) Cor

Foundations.

Raymond Concrete Pile Co., New York, N. Y.
Underground Constr. Co., The, St. Louis, Mo

Foundations. (Open or Pneumatic.) issouri Val. Bridge & Iron Co., Leavenw w'th, Kan.

Foundry Equipment and Supplies. Paxson Co., J. W., Philadelphia, Pa. Frogs. [See Railroad Frogs and Switches.]

Fuel Economizer. Green Fuel Economizer Co., Matteawan, N. Y. Sturtevant Co., B. F., Hyde Park, Mass.

Fuel Oil. ulf Refining Co., Pittsburg, Pa. exas Co., The, New York, N. Y.

Fuel Oil Equipment.
tagram Fuel Oil Burner Co., Newport News, Va.
Petroleum Iron Works Co., Sharon, Pa.

Furnace Builders. Riter-Conley Mfg. Co., Pittsburg, Pa.

Fuses, Bases and Fittings.
ohns-Manville Co., H. W., New York, N. Y. Galvanized Steel and Iron.

Galvanized Steel and Iron.
American Sheet & Tin Plate Co., Pittsburg, Ps.
J. O. H. Galvanizing Co., Philadelphia, Pa.
La Belle Iron Works, Steubenville, O.
McCalla, Harold, Philadelphia, Pa.
New Orleans Roof & Metal Co., New Orleans, La.
Wood Iron & Steel Co., Alan, Philadelphia, Pa.
Youngstown Sheet & Tube Co., Youngstown, O.

Gas Biowers. (Turbine.) erry Steam Turbine Co., New York, N. Y.

Gas Compressors. Blaisdell Machinery Co., Bradford, Pa. Ingersoll-Rand Co., New York, N. Y.

Bartlett-Hayward Co., The, Baltimore, Md. Chicago Bridge & Iron Wks., Chicago, Ill

Gas Machines.

Gas Plants. Western Gas Construction Co., Ft. Wayne, Ind.

Gas Plants and Benches. aproved Equipment Co., New York, N. Y.

Gas Plants. (Coal and Water.) artlett-Hayward Co., The, Baltimore, Md.

Gas Producers.

Bogart Gas Power Eng. Co., Buffalo, N. Y. De La Vergue Machine Co., New York, N. Y. Improved Equipment Co., New York, N. Y. Staudard Gas Power Co., Atlanta, Ga. Weatinghouse Machine Co., Pittaburg, Pa. Wood & Co., R. D., Philadeiphia, Pa.

Gasoline and Kerosene. Gulf Refining Co., Pittsburg, Pa. Texas Co., The, New York, N. Y.

Gas and Steam Fitters' Tools. nunders' Sons, D., Yonkers, N. Y.

Gaskets. (Rubber.) N. J. Car Spring & Rubber Co., Jersey City, N. J.

Caldwell Co., Inc., W. E., Loulaville, Ky.
Caldwell & Son Co., H. W., Chleago, Ill.
Dodge Manufacturing Co., Mishawaka, Ind.
Earle Gear & Machine Co., The, Philadelphin, Pa.
Great Southern Automobile Co., Birmingham, Ala.
Jeffrey Mfg. Co., Columbus, O.,
Poole Engineering & Machine Co., Baltimore, Md.
Positive Clutch & Pulley Works, Buffalo, N. Y.
Trump Mfg. Co., Springfield, O.

Geologists.

Clapp, Frederick C., Pittsburg, Pa. Froehling & Robertson, Richmond, Va.

Glass. (Plate, etc.) Binswanger & Co., Memphis, Tenn.

Governors. Ickering Governor Co., Portland, Conn.

Grain Elevator Supplies.
Caldwell & Sons Co., H. W., Chicago, Ill.
Dodge Manufacturing Co., Mishawaka, Ind.
Jeffrey Mfg. Co., Columbus, O.
Link-Belt Co., Nicetown (Philadelphia), Pa.

Granite. Harris Granite Quarries Co., Salisbury, N. C.

Graphite.

Detroit Graphite Co., Detroit, Mich. Dixon Crucible Co., Joseph, Jersey City, N. J. Grates and Grate Bars.

Couroy Mfg. Co., North East, Md. Patch & Son Co., S. B., Streator, Ill. Thomas Grate Bar Co., Birmingham, Ala.

Gravel.

Arundel Sand & Gravel Co., Baltimore, Md. Cassels Cement Gravel Co., Augusta, Ga. Southern Sand & Gravel Co., Richmond, Va. Greases and Lubricating Compounds.

Cook's Sons, Adam, New York, N. Y. Galena Signal Oil Co., Franklin, Pa. Robinson & Son Co., Wm. C., Baltimore, Md. Texas Co., The, New York, N. Y.

Grease and Oil Cups and Lubricators. Cook's Sons, Adam, New York, N. Y.

Grinders. (Gypsum, Limestone, etc.) Gardner Crusher Co., New York, N. Y. Williams Pat. Crusher & Pulv. Co., Chicago, Ill.

Grinding Wheels.

Abrasive Material Co., Philadelphia, Pa. Carborundum Co., Niagara Falis, N. Y. Norton Co., Worcester, Mass. Vitrified Wheel Co., Westfield, Mass.

Groovers.

Huther Bros. Saw Mfg. Co., Rochester, N. Y.

Gunpowder.

du Pont-de Nemours Powder Co., E. I., Wilming

Hammers. (Steam, Power, Pneumatic.)

Chicago Pneumatic Tool Co., Chicago, Ill. Independent Pneumatic Tool Co., Chicago, Ill. Ingersoll-Rand Co., New York, N. Y.

Hand Elevators Sidney Elevator Mfg. Co., Sidney, O.

Handle Machinery. [See Woodworking Mchy.]

Hangers. [See Pulleys, Shafting and Hangers.]

Hauling Engines. (Steam Traction.) Case Threshing Mach. Co., J. I., Racine, Wis.

Hay Tools. Myers & Bro., F. E., Ashland, O.

Heater. (Portable, for Bltuminous Pavements.) Ruggles-Coles Engineering Co., New York, N. Y.

Heating Apparatus, Engineers and Con-

Bartlett-Hayward Co., Baltimore, Md. Buffalo Forge Co., Buffalo, N. Y. Monitor Steam Generator Mfg. Co., Balto., Md. Peck-Hammond Co., The, Chachnaxt, O.

Holsting Machinery.

American Holat & Derrick Co., St. Paul, Minn. Brown Holsting Mchy. Co., Cleveland, O. Byers Machine Co., John F., Ravenna, O. Clyde Iron Works, Duluth, Minn. Contractors Plant Mgs. Co., Ltd., Buffalo, N. Y. Dake Engine Co., Grand Haven, Mich. Exeter Machine Works, Pittston, Pa. Flory Mgs. Co., S., Bangor, Pa. Hayward Co., New York, N. Y. Link-Belt Co., Nicetown (Philadelphia), Pa.

Lidgerwood Mfg. Co., New York, N. Y.
Maies Co., Cincinnati, O.
Meud-Morrison Mfg. Co., Cambridgeport, Mass.
Monighan Machine Co., Clicago, ill.
National Hoisting Engine Co., Harrison, R. J.
Stroudsburg Engine Works, Stroudsburg, Pa.
Williamson Bros. Co., Philadelphia, Pa.

Hoists. CHAIN.

Ford Chain Block & Mfg. Co., Philadelphia, Pa. Speidel, J. G., Reading, Pa.

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ELECTRIC.

American Holat & Derrick Co., St. Paul, Mins.
Lidgerwood Mfg. Co., New York, N. Y.
Monighan Mch. Co., Chicago, Ill.
Northern Engineering Works, Detroit, Mich.
Patten Mfg. Co., Chattanooga, Tenn. PNEUMATIC MOTORS

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Chicago Pneumatic Tool Co., Chicago, 111. Ingersoll-Rand Co., New York, N. Y.

Hoops, Bands, etc. (Galvanized. J. C. H. Galvanizing Co., Philadelphia, Pa. McCalla, Harold, Philadelphia, Pa. Hoops. (Barrel.)
American Steel & Wire Co., Chicago, Ill.
Carnegie Steel Co., Pittsburg, Pa.

Hose.

Eureka Fire Hose Mfg. Co., New York, N. Y.
N. J. Car Spring & Rubber Co., Jersey City, N. J.

Hotels. Hotel Essex, Boston, Mass. Hot Water Service Heaters. Iberger Condenser Co., New York, N. Y.

Hydrants. nydrants.

Bourbon Copper & Brass Wks Co., Cincinnati, Q.

Columbian Iron Works, Chattanooga, Tenn.

Glamorgan Pipe & Foundry Co., Lynchburg, Va.

Goulds Mfg. Co., Seneca Falls, N. Y.

Myers & Bro., F. E., Ashland, Q.

Wood & Co., R. D., Philadelphia, Pa.

Hydraulic Giants. merican Spiral Pipe Works, Chicago, Ill.

Hydraulic Rams.
Goulds Mfg. Co., Seneca Falls, N. Y.
Rife Engine Co., New York, N. Y.

Rife Engline Co., New York, N. Y.

Icemaking Machinery and Supplies.
Columbus Iron Works Co., Columbus, Ga.
Creamery Package Mfg. Co., Chicago, Ill.
De La Vergne Machine Co., New York, N. Y.
Frick Co., The, Wayneshoro, Pa.
International Filter Co., Chicago, Ill.
Remington Machine Co., Wilmington, Del.
Tait-Nordmeyer Eng. Co., St. Louls, Mo.
Vilter Mfg. Co., Milwaukee, Wis.
Vogt Machine Co., Henry, Loulsville, Ky.
Wolf Mfg. Co., The Fred W., Chicago, Ill.
York Mfg. Co., York, Pa.

Incorporators. (Companies.) Delaware Trust Co., Wilmington, Del.

Industrial, Agricultural and Commercial Opportunities.

CITIES AND TOWNS.

Atlanta, Ga., Ga. Bureau of Indus'y & Immig'a.
Baltimore, Md., Gas & Electric Co.
Baltimore, Md., Cloud & Clark.
Dalworth (Grand Prairie P. O.), Tex., Dalworth

Texas City, Tex., Texas City Transportatios On RAILROADS.

Atlanta, Birm'gh'm & Atlantic R. R., Atlanta, Ga, Atlanta & West Point R. R. Co., Montgomery, Ala. Baltimore & Ohio Railroad, Baltimore, Md. Carolina, Clinchifeld & O. Ry., Johnson City, Texas. Central of Georgia Ry. Co., Savannah, Ga. Illinois Central Railroad Co., Chicago, Ill. Norfolk & Western Railway, Roanoke, Va. Seaboard Air Line, Portsmouth, Va. Southern Bailway Co., Washington, D. C.

Industrial Track Work. [See Railways, Ind.] Injectors.

Jenkins Bros., New York, N. Y. Sellers & Co., Inc., Wm., Philadelphis, Pa.

Insulating Materials. Johns-Mansville Co., H. W., New York, N. Y. Southern Pipe Covering Co., Inc., Richmond, Va. Insurance.

Hartford Fire Insurance Co., Hartford, Cons. Maryland Casualty Co., Baltimore, Md.

Interior Trim. (Metallic.) Dabletrom Metallic Door Co., Jamestown, N. Y.

Interstate Commerce Practice. Van Sant, Frank, Washington, D. C.

Iron.

Alabama Con. Cosl & Iron Co., Birmingham, Ala.
American Rolling Mill Co., Middletown, O.
La Belle Iron Works, Steubenville, O.
Lebanon Valley Iron & Steel Co., Lebanoa, Pa.
Milton Mig. Co., Milton, Pa.
Republic Iron & Steel Co., Youngstown, O.
Tenneasee Coal, Iron & R. R. Co., B'mgh'm, Ala.
Wood Iron & Steel Co., Alan, Philadelphia, Pa.

Irrigation Machinery.
Blakeslee Mfg. Co., Du Quoin, Ill.
Cameron Steam Pump Wks., A. S., New York, N. I.

Kettles. (Steam Jacket.)
Badger & Sons Co., E. B., Boston, Mass.
Petroleum Iron Works Co., Sharon, Pa.

Key Seater. (Portable.) Burr & Son, John T., Brooklyn, N. Y. Knitting Machinery.

Acme Knitting Machine & Needle Co., Frantila
Falls, N. H.

Lacquers. (All Purposes.) Durlacque Mfg. Co., St. Louis, Mo.

Durlacque Mfg. Co., 8t. Louis, Mo.

Lamp Posts. (Electric, Gas.)
Western Gas Construction Co., Ft. Wayne, Ind.

Lamps. (Arc and Incandescent.)
Boston Incandescent Lamp Co., Danvers, Mass.
Columbia Incandescent Lamp Co., 8t. Louis, Ma
Doubleday-Hill Electric Co., Pittsburg, Pa.
Fostoria Incandescent Lamp Co., Fostoria, O.
General Electric Co., Schenectady, N. Y.
Kentucky Electrical Co., Owensboro, Ky.
Lee Electric Co., Baltimore, Md.
Pledmont Electric Co., Asbeville, N. C.
Western Electric Co., New York, N. Y.
Westinghouse Elec. & Mfg. Co., Pittsburg, Ps.

Lands.

Hisr & Wilson, Roanoke, Va.

Hisr & Wilson, Roanoke, Va.

Hisr & Clark, Baltimore, Md.

soid & Clark, Baltimore, Md.

soid & Co., Albert, Brunswick, Ga.

sticklish, H. B., Washington, D. O.

insbrough & Co., J. T., Atlanta. Ga.

loris & Co., Abbott, Norfolk, Va.

lobertson, W. W., Norfolk, Va.

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Lath. (Expanded Metal.)
Carolina Portland Cement Co., Charleston, S. O.,
Wilwatte Corrugating Co., Milwankee, Wis.

Lathes. (Engine.)

Greaves. Klusman & Co., Cincinnati, O.

Manning. Maxwell & Moore, Inc., New York, N. Y.

utant Valley Mch. Tool Co., Dayton, O.

Lawn Furniture.
Bolles Iron & Wire Works, J. E., Detroit, Mich.
Dufur & Co., Baltimore, Md.
Dufur, Baggott & Co., Baltimore, Md.

Leadite. Leadite Co., The, Philadelphia, Pa.

Lime. Portland Cement Co., Charleston, S. C. cardina Portland Cement & Lime Co., Baltimore, Md. cardesastern Lime & Cement Co., Charleston, S. C. dekewater Portland Cement Co., Baltimore, Md.

Lime. (Hydrated.) Security Cement & Lime Co., Baltimore, Md. Tidewater Portland Cement Co., Baltimore, Md.

Lime Kilns and Equipment.

Limestone Products.

Liquor Filters. ternational Filter Co., Chicago, Ill.

Lithographers, Engravers. Young & Selden Co., Baltimore, Md.

Lockers. (Metal.) Keighley Metal Ceiling Mfg. Co., S., Pittsburg, Pa.

Lecomotives. INDUSTRIAL.

American Locomotive Co., New York, N. Y.
Saldwin Locomotive Works, The, Philadelphia, Pa.
Byers Machine Co., John F., Ravenna, O.
Climar Mfg. Co., Corry, Pa.
Bureaport Locomotive Works, Davenport, Ia.
Lefter Mfg. Co., Columbus, O.
Lima Lecomotive & Machine Co., Lima, O.
Males Co., Cincinnati, O.
Fetter Co., H. K., Pittsburg, Pa.
Telcan Iron Works, Wilkes-Barre, Pa.

imerican Locomotive Co., New York, N. Y. Raldwin Locomotive Works, The, Philadelphia, Pa., Lima, O., Lima, O., Lima, O., Cinclimati. O., Cinclimati. O., Cinclimati. O., Norfolk, Va.

Looms and Weaving Machinery.

Draper & Co., Hopedale, Mass.

Mass Machine Works, Taunton, Mass.

industrial Lumber Co., Elizabeth, La. Massee & Felton Lumber Co., Macon, Ga.

Lumber. (Heavy Construction, Pitch Pine, etc.) Massee & Felton Lumber Co., Macon, Ga. National Lumber & Creesot. Co., Texarkans, Ark. Naylor & Co., S. E., Gulfport, Miss.

Lumber. (Yellow Pine.) Industrial Lumber Co., Elizabeth, La.

Lumber Buggies. Soule Steam Feed Works, Meridian, Miss.

Lumber Stackers. Soule Steam Feed Works, Meridian, Miss.

Machinery. (Special.)

Black & Decker Mfg. Co., Baltimore, Md.
Blac Co., E. W., Brooklyn, N. Y.
Kling, Lewis T., Alpenn, Mich.
Leffer & Co., Charles, Brooklyn, N. Y.
Leffer & Co., Charles, Brooklyn, N. Y.
Raymond Bros. Impact Pulv. Co., Chicago, Ill.
Boyersford Fdry, & Meh. Wks., Royersford, Pa.
Button & Bragg Co., Petersburg, V.
Universal Telegraphic Co., Baltimore, Md.

Machinery and Supplies. (New and Sec Hand Bargains.)

Machinery and Supplies. (New and Second-Hand Bargains.)

Hato, Iron, Steel & Metal Co., Baltimore, Md. Baito, Metal Mchry. & Supply Co., Baltimore, Md. Baito, Metal Mchry. & Supply Co., Baltimore, Md. Baito, Metal Mchry. & Supply Co., Baltimore, Md. Campbell, Thos. J., Philadelphia, Pa. Chicago, Ill. Chereland Belting & Machinery Co., Cleveland, O. Dorner Raliway Equipment Co., Chicago, Ill. Chereland Belting & Machinery Co., Cleveland, Pa. Botting Mchy. Co., New York, N. Y. Baston, R. C., Memphia, Tenn.

Buttaging Mchry. & Supp. Co., Wilkes-Barre, Pa. Byde Bros. & Co., New York, N. Y. Baston, R. C., Memphia, Tenn.

Levase & Co., E., Philadelphia, Pa. Lishen, W. J., New York, N. Y. Lewan, Charles T., Birmingham, Ala. Levase & Co., E., Philadelphia, Pa. Lishen, W. J., New York, N. Y. Same Metal & Supply Co., New York, N. Y. Same Metal & Supply Co., New York, N. Y. Philadelphia, Pa. Pittaburg, W. J., Philadelphia, Pa. Prettias Too & Supply Co., New York, N. Y. Prettias Too, Charling Ph., Charles Ph., Philadelphia, Pa. Randel Machinery Co., Clincinnati, O. Rad Go., Hung, Philadelphia, Pa. Baytert's Sons, Inc., New York, N. Y. Toomey, Frank, Philadelphia, Pa. Machinery Exchange, Tanpa, Pila. Toomey, Frank, Philadelphia, Pa. LAL DO

Machine Tools. Greaves, Klusman & Co., Cincinnati, O. Manning, Maxwell & Moore, Inc., New York, N. Y. Minni Valley Mch. Tool Co., Dayton, O.

Machinists. (Engineers.) American Mcb. & Mfg. Co., Charlotte, N. C. Rousoke Iron Works, Inc., Roanoke, Va. Stratton & Bragg Co., Petersburg, Va.

Magnesia Materials.

Magnets. (Electric Lift.) rowning Engineering Co., Cleveland, O.

Magnet Electro. (For Cottonseed, Linters and Dixle Electro Magnet Co., Memphis, Tenn.

Magnetic Separators. Paxson Co., J. W., Philadelphia, Pa.

Mail Chutes. Cutler Mail Chute Co., Rochester, N. Y.

Mantels. (Wooden.) orthoross Mantel Co., W. J., Memphis, Tenn.

Marble Work. (Interior.)
Dagostin & Angelini Bros., Montgomery, Ala.
Southern Mosaic Tile Co., Birmingham, Ala.

Mechanical Draft. Mechanical Draft.

American Blower Co., Detroit, Mich.

Buffalo Steam Pump Co., Buffalo, N. Y.

Garden City Fan Co., Chicago, Ill.

Sturtevant Co., B. F., Hyde Park, Mass.

Metal Cellings. [See Cellings, Metal.]

Metaline. North Amer. Metaline Co., Long Island City, N. Y. Metal Culverts. [See Culverts.] (Corrugated

Metal Polish. Hoffman, Geo. W., Indianapolis, Ind.

Metal Shingles.
Cincinnati Sheet Metal & Rfg. Co., Cincinnati, O. Cortright Metal Roofing Co., Philadelphia, Pa. Edwarda Manufacturing Co., Cincinnati, O. Hyndman Roofing Co., Cincinnati, O.

Metal Window Frames and Sashes. Edwards Mfg. Co., The, Cincinnati, O. Keighley Metal Cell. & Mfg. Co., S., Pittsburg, Pa. Volgtmann & Co., Ohleago, Ill.

Metal Work. (Stamped and Embossed Hotel Checks, Key Tags, etc.) American Railway Supply Co., New York, N. Y. Metal-Working Machinery.

Metal-Working Machinery.
Bertach & Co., Cambridge City, Ind.
Bliss Co., E. W., Brooklyn, N. Y.
Gibbes Machinery Co., Columbia, S. C.
Leffler & Co., Chas., Brooklyn, N. Y.
Price Machinery Co., S. M., Norfolk, Va.
Royersford Fdry. & Mach. Co., Royersford, Pa.

Micrometers, Calipers, Etc. Starrett Co., L. S., Athol, Mass

Milk Fliters. (Liquor, Milk, etc.) nternational Fliter Co., Chicago, Ill.

Mill Engineers and Architects.
Lockwood, Greene & Co., Boston, Mass.
Sirrine, J. E., Greenville, S. C.
Soble, Edward, Charlotte, N. C.

Sohle, Edward, Charlotte, N. C.

Mill Supplies.
Appomattox Iron Works, Petersburg, Va.
Bailey-Lebby Co., Charleston, S. C.
Cameron & Barkley Co., Charleston, S. C.
Gainesville Iron Works, Gainesville, Ga.
Greenwald Co., I. & E., Clnelmnatl, O.
Lombard Iron Works, Augusta, Ga.
Manning, Maxwell & Moore, Inc., New York, N. Y.
Mecklenburg Iron Works, Charlotte, N. C.
Nordyke & Marmon Co., Indianapolis, Ind.
Salem Foundry & Machine Works, Salem, Va.
Smith-Courtney Co., Ittchmond, Va.
Start Co., B. F., Baltimore, Md.
Stratton & Bragg Co., Petersburg, Va.
Wolf Co., Chambersburg, Pa.

Mining Machinery. (Gold. Copper, Plate, etc.)
Bartlett & Snow Co., C. O., Cleveland, O.
Jeffrey Mig. Co., Columbus, O.
McLamhan-Stone Mach., Columbustor, Pa.
McCalling, Columbus, O., Hollidaysburg, Pa.
McCalling, Columbus, O., McCalling, Columbus, O.,
McCalling, Machinery Co., Cudaly, Wis.
Raymond Bros. Impact Puly. Co., Chicago, Ill.

Mixing Machinery. Dunning, W. D., Syracuse, N. Y. Lynn-Superior Co., The, Cincinnati, O.

Mold. (Cement.) Simpson Cement Mold Co., Columbus, O.

Mortar Colors. Chattanooga Paint Co., Chattanooga, Tenn.

Motor Trucks. celly Motor Truck Co., Springfield, O.

Mouldings, Casings, etc. Massee & Felton Lumber Co., Macon, Ga. Nails and Spikes.

American Steel & Wire Co., Chicago, Ill.

Hoffman & Co., R. C., Baltimore, Md.

Lebanon Valley Iron & Steel Co., Lebanon, Pa.

Republic Iron & Steel Co., Youngstown, O.

West Virginia Rail Co., The, Huntington, W. Va.,

Youngstown Sheet & Tube Co., Youngstown, O.

Nitre Pots, Eggs.
Pratt Engineering & Mach. Co., Atlanta, Ga.
Nuts. [See Bolts, Nuts, Rivets, etc.]

Office Furniture.
Quincy Show Case Works, Quincy, Ill.
Ruse & Thompson, Baltimore, Md.

Ruse & Thompson, Baltimore, Md.

Olfs. (Lubricating, etc.)

Borne-Scrymser Co., New York, N. Y.

Galena Signal Oli Co., Franklin, Pa.

Gulf Refining Co., Pittaburg, Pa.

Robinson & Son Co., Wm. C., Baltimore, Md.

Texas Co., The, New York, N. Y.

Oil-Burning Appliances.
Ingram Fuel Oil Burner Co., Newport News, Va.
Petroleum Iron Works Co., Sharon, Pa.

Oil Cans. Wall Mfg. Supply Co., P., Allegheny, Pa. Oli Separators. Stewart Heater Co., Buffalo, N. Y.

Oil Stones. Carborundum Co., Niagara Falls, N. Y. Norton Co., Worcester, Mass.

Oli-Storage Systems.

Hydraulic Oll Storage Co. of Maryland, Baltimore, Md.

Ornamental Iron Work.

Ornamental Iron Work.

Belmoat Iron Works, Inc., Philadelphia, Pa.

Bolles Iron & Wire Works, J. E., Detroit, Mich.

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Broderick & Bascom Rope Co., St. Louis, Mo.
Columbian Rope Co., Adulum, N. Y.
Plymouth Cordage Co., North Plymouth, Mass.
Turner Co., J. Spencer, New York, N. Y.
Whitlock Cordage Co., New York, N. Y.

Rope. (Transmission and Holsting.)
American Mfg. Co., New York, N. Y.
American Mfg. Co., New York, N. Y.
American Steel & Wire Co., Chicago, Ill.
Broderick & Bascom Rope Co., St. Louis, Mo.
Caldwell Co., Inc., W. E., Louisville, Ky.
Columbian Rope Co., Auburn, N. Y.
Dodge Manufacturing Co., Mishawaka, Ind.
Hunt Co., C. W., West New Brighton, N. T.
Plymouth Cordage Co., North Plymouth, Mass.
Whitlook Cordage Co., New York, N. Y.
Wood's Sons Co., T. B., Chambersburg, Pa.

Rope Drives.
Caldwell Co., Inc., W. E., Louisville, Ky.
Caldwell & Son, H. W., Chicago, III.
Dodge Manufacturing Co., Mishawaka, Ind.
Jones & Laughilh Steel Co., Pittsburg, Pa.
Wood's Sona Co., T. B., Chambersburg, F.

Rope Machinery. askell-Dawes Machine Co., Boston, Mass.

Rubber Goods.

reka Fire Hose Mfg. Co., New York, N. Y. w Jersey Car Sp'g & Rub. Co., Jersey City, N. J.

Rules. (Steel.) Lufkin Rule Co., The. Saginaw, Mich. Starrett Co., L. S., Athol. Mass.

Safes and Vaults. York Safe & Lock Co., York, Pa.

Safety Appliance. (For Elevator.)
oth Elevator Safety Co., Inc., Baltimore, Md. Sand.

Arundel Sund & Gravel Co., Baltimore, Md. Cassels Cement Gravel Co., Augusta, Ga. Kirkpatrick Sand & Cem. Co., Birmingham, Ala. Southern Sand & Gravel Co., Richmond, Va.

Sand Lime Brick Machinery. American Clay Machinery Co., The, Bucyrus, O.

Sand Rammers.

Sap Stain Preventive. Church & Dwight Co., New York, N. Y.

Sash Chain.
Ningara Falls Metal Stumping Works, Niagare Falls, N. Y.

Saws.
Gibbes Machinery Co., Columbia, S. C.
Huther Bros, Saw Mig. Co., Rochester, N. Y.
Smith Machine Co., H. B., Smithville, N. J.
Sydnor Pump & Well Co., Richmond, Va.

Saws. (Band.) Smith Machine Co., H. B., Smithville, N. J.

Saws. (Hack.) Starrett Co., L. S., Athol, Mass.

Sawmili Dogs. oule Steam Feed Works, Meridian, Miss. Sawmills. Appoinstion Iron Works, Petersburg, Va. Gainesville Iron Works, Gainesville, Ga. Vance & Co., J. A., Salem, N. C.

Sawmill Machinery. Sawmill Machinery.

Balley-Lebly Co., Charleston, S. C.

Cameron & Barkley Co., Charleston, S. C.

Chase Turbine Mfg. Co., Orange, Mass.

Gibbes Machinery Co., Columbia, S. C.

Knight Mfg. Co., Canton, O.

Lane Mfg. Co., Sontpeller, Vt.

Mecklenburg Iron Works, Charlotte, N. C.

Price Melly, Co., S. M., Norfolk, Va.

Schofield's Sons Co., J. S., Macon, Ga.

Southern Engine & Boller Works, Jackson, Tenn.

Sydnor Pump & Well Co., Richmond, Va.

Usion Iron Works Co., Selma, Ala.

Vance & Co., J. A., Salem, N. C.

Saw Sharpeners.

Abrasive Material Co., Philadelphia, Pa.
Carborundum Co., Niagars Falls, N. Y.
Norton Co., Worcester, Mass.
Vitrified Wheel Co., Westfield, Mass.

Saw Sharpeners and Flies. (Cotton Gin.) Carver Cotton Gin Co., East Bridgewater, Mass.

Scales.

Howe Scale Co., New York, N. Y.

Rome Scale & Mfg. Co., Bome, Ga.

Standard Scale & Supply Co., Pittsburg, Pa.

Screening Apparatus. Walker & Elliott, Wilmington, Del.

Screens. (Fly, Window and Door New Jersey Wire Cloth Co., Trenton, N

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New Jersey Wire Cloth Co., Trenton, N. J.

Screens. (Mining.)

Erdle Perforating Co., Rochester, N. T.

Hendrick Mfg. Co., Carbondale, Pa.

Jeffrey Mfg. Co., Columbus, O.

New Jersey Wire Cloth Co., Trenton, N. J.

Mundt & Sons, Charles, Jersey City, N. J.

McLanahan-Stone Mach. Co., Holldaysburg,

Symons Bros., Milwaukee, Wis.

Searchlights.
. Wayne Electric Works, Ft. Wayne, Ind. Separators. (Dust.)
Buffalo Forge Co., Buffalo, N. Y.
Raymond Bros. Impact Pulv. Co., Chicago, III.
Savannah Blow Pipe Co., Savannah, Ga.
Skinner Bros., St. Louis, Mo.

Sewer Pipe Machinery. merican Clay Machinery Co., The, Bucyrus, 6, aplin-Rice-Clerkin Co., Akron, O.

Sewer Pipe. (Vitrified.)
rollina Portland Gement Co., Charleston, 8. 0,
mona Terra-Cotta Co., Pomona, N. 0,
evens Sons Co., II., Macon, Ga.

Shafting. (Polished Steel.) Field & Co., Inc., Philadelphia, Pa. Jones & Laughlin Steel Co., Pittaburg, Pa. Republic Iron & Steel Co., Youngatown, O. Shafting Boxes. Hyatt Roller Bearing Co., Newark, N. J.

Shafting. (See Pulleys, Shafting and Hangers,) Sharpening Stones. Norton Co., Worcester, Mass. Vitrified Wheel Co., Westfield, Mass

Shears. (Metal.) Royersford Fdry. & Mach. Co., Boyersford, Pa.

Sheet Brass and Copper.

Hussey & Co., C. G., Pittsburg, Pa.

Merchant & Evans Co., Philadelphia, Pa. Sheet Metal Working Machinery.

Sheet Piling. (Concrete.)
aymond Concrete Pile Co., New York, N. Y.

Sheet Steel and Iron. Sheet Steel and Iron.
Allegheny Streel Co., Pittaburg, Pa.
American Rolling Mill Co., Middletown, O.
American Sheet & Tin Pitate Co., Pittaburg, Pa.
Cincimnati Iron & Steel Co., Cincimnati, O.
La Beile Iron Works, Stewlenville, O.
Republic Iron & Steel Co., Youngstown, O.
Tennessee Coal, Iron & R. R. Co., B'mgh'm, Ala.
Wood Iron & Steel Co., Alan, Philadelphia, Pa.
Youngstown Sheet & Tube Co., The, Youngstown, O.

Shingles. (Metal.)
Carolina Portland Cement Co., Charleston, S. C. Cincinnari Sheet Metal & Rfg. Co., Cincinnati, O. Cortright Metal Bonding Co., Philadelphia, Pa. Edwards Mfg. Co., Cincinnati, O. Hyndman Roofing Co., Cincinnati, O. Milwaukee Corrugating Co., Milwaukee, Wis.

Shipping Tags. ennison Mfg. Co., Boston, Mass.

Shovels. (R. R. Contractors', Fdry., Mill, etc.)
xas Handle Co., Houston, Tex.

Shredders. (Bark, Chip, etc.)
Williams Pat. Crush. & Pul. Co., The, Chicago, Ill. Shutters. (Iron.)
Bolles Iron & Wire Works, J. E.. Detroit, Mich.
Chesspeake Iron Works, Baltimore, Md.

Shutters. (Steel Rolling.) Kinnear Mfg. Co., Columbus, O.

Shutters. (Tin Clad.) leter Mfg. Co., Newburype ort, Mass.

Siding and Roofing. (Bird Sand and Chippel Slate Surfaced.)

Bermingham & Seaman Co., Chicago, Ill. Signs. (Metal Lithographed.) Southern Can Co., Baltimore, Md.

Signs. (Road, Street, Outdoor, Advt.) destructible Sign Co., Bishopville, S. C. Skylights and Cornices.

Milwaukee Corrugating Co., Milwaukee, Wis. New Orleans Rfg. & Metal Wks., New Orleans, Ls. Siate. (Structural, Sanitary, etc.)

Carolina Portland Cement Co., Charleston, S. C. East Bangor Consol. Slate Co., East Bangor, Pa. Genuine Bangor Slate Co., Easton, Pa. Hower, J. K., Slatington, Pa. Slater's Tools. ilt & Sons, John, New York, N. Y.

Sluice Gates and Appliances. Coldwell-Wilcox Co., Newburgh, N. Y.

Smokestacks. (Iron and Steel.) Chattanooga Boller & Tank Co., Chat'n'g Keeler Co., E., Williamsport, Pa. Lombard Iron Works, Augusta, Ga. Petroleum Iron Works Co., Sharon, Pa. Schoffeld's Sous Co., J. S., Macon, Ga. Virginia Bridge & Iron Co., Roanoke, Va. Chat'n'ga, Teen

Smokestacks. (Steel-Concrete.) Weber Chimney Co., Chicago, Ill. Spikes. [See Nails and Spikes.]

Spiral Stairs.

aquette Foundry & Supply Co., Massena, N. I.

Springs. (Machinery, Railway, Spiral.) American Steel & Wire Co., Chicago, Ill. Cary Spring Works, New York, N. Y. Raymond Mfg. Co., Ltd., Cerry, Pa.

Sprinklers. (Automatic.) General Fire Extinguisher Co., Providence, B. L.

Stamp Mills. Mecklenburg Iron Works, Charletts, N. C.

Stamps, (Brass, Rubber.) Bennett Rubber Stamp & Seal Co., Atlanta, Ga.

Standpipes.
Chattanouga Boller & Tank Co., Chat'n'ga, TenaChicago Bridge & Iron Wka, Chicago, Ill.
Hartley Boller Works, Mostgomety, Ala.
Keeler Co., E., Williamsport, Fa.
Petroleum Iron Works Co., Sharon, Pa.

Stapling Machinery. (Fruit Package Basket, etc.) presse Machine Co., St. Joseph, Mich. Stationers. (Envelopes, etc.)

Steam Feeds.

N. J.

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Pa.

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k. N. T.

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Mill. etc.)

Thicago, Ill.

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Steam Fitters' Supplies.

Steam Fitters' Supplies.

Geeral Fire Extinguisher Co., Providence, R. I.

issumers' Sons, D., Yonkers, N. Y.

Steam Heating.

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Steam Heating.

Steam Heating.

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Steam Heating.

R. I.

Steam Heati

eck-Hammon Steamship Lines. altimore Steam Packet Co., Baltimore, Md. heaspeake Steamship Co., Baltimore, Md. gespeake Steamship Co., Baltimore, Md.

Steam Separators.

Soppes Mfg. Co., Springfield, O.
theightom's Much. Wks., John T., Allentown, Pa.

Steam Shovel Chains.
Telmer Chain & Iron Co., Lebanon, Pa.
Steam Shovels. [See Excavating Machinery.]

Steam Shovels. (Revolving.)
Browning Engineering Co., Cleveland, O.

Steam Specialties.
Fowell Co., Wm., Cincinnati, O.
Pener, J. R., Charlotte, N. C.

Steam Traps.
imerican Blower Co., Detroit, Mich.
lekins Bros., New York, N. Y.
Lekins Wash, N. Y.
Lightrom's Much. Wks., John T., Allentown, Pa.

Steel.

America Rolling Mill Co., Middletown, O.
Cursels Steel Co., Plitsburg, Pa.
Piel & Co., Inc., Philadelphia, Pa.
Boffman & Co., R. C., Baltimore, Md.
Jones & Laurhilm Steel Co., Plitsburg, Pa.
Lebanon Valley Iron & Steel Co., Lebanon, Pa.
Lebanon Valley Iron & Steel Co., Lebanon, Pa.
Republic Iron & Steel Co., Xoungatown, O.
Republic Iron & Steel Co., M. G., Birm'gh'm, Ala.
Wood Iron & Steel Co., Ainn, Philadelphia, Pa.
Steel Co., Ainn, Philadelphia, Pa. Quels. (Tool.)

field & Co., Inc., Philadelphia, Pa. Jessops Sons Steel Sales Co., Wm., St. Louis, Mo.

Steel. (Vanadium.) megle Steel Co., Pittaburg, Pa.

Steel Buildings. (Designers, Builders.)

Steel Buildings. (Uesigners, Builders.)
imerican Bridge Co. of New York, New York, N. Y.
Builmore Bridge Co., Baltimore, Md.
Bartlett-Hayward Co., The, Baltimore, Md.
Chespeake Iron Works, Baltimore, Md.
Chespo Bridge & Iron Wiss., Chicago, Ill.
Faris Bridge Co., Pittsburg, Pa.
Missouri Valley Bridge & Iron Co., Leavenworth,
Essa.

Bans Valley Bridge & tron Co.,

Kans.

Crucible Steel Castings Co., Lansdowne, Pa. Boffman & Co., R. C., Baltimore, Md. Ballance Steel Casting Co., Pittsburg, Pa. Birenide Steel Casting Co., Newark, N. J.

Steel Plate Work.

Steel Plate Work.

Bardett-Hayward Co., The, Baltimore, Md.

Chart-Hedges Co., Chattanooga, Tenn.

Chattanooga Boiler & Tank Co., Chat'n'ga, Tenn.

Chatgo Bridge & Iron Wks., Chicago, III.

Boffman & Co., R. C., Baltimore, Md.

Pisents Iron Co., Philadelphia, Pa.

Bepublic Iron & Steel Co., Youngstown, O.

Riter-Conley Mfg. Co., Pittsburg, Pa.

Steel Protector. (Concrete Curb Steps, etc.)
[See Protector Steel.]

Steel Sheet Piling.

Carnegie Steel Co., Pittsburg, Pa. Jose & Laughlin Steel Co., Pittsburg, Pa.

Steering Gears. (Steamboat.) Stencilis.

altimore Office Supply Co., Baltimore, Md. izie Seal & Stamp Co., Atlanta, Ga.

Stirrups. (Building.) bempeske Iron Works, Baltimore, Md.

Stock Certificates, Bonds and Seals. faltimere Office Supply Co., Baltimore, Md. Dirie Seal & Stamp Co., Atlanta, Ga.

Stokers. (Mechanical.) beck & Wilcox Co., New York, N. Y.
rrisburg Fdry. & Mach. Works, Harrisburg, Pa.
stinghouse Machine Co., Pittsburg, Pa.

Storage Butterles.

Lee Electric Co., Baltimore, Md. Ele. Storage Battery Co., The, Philadelphia, Pa. Westinghouse Machine Co., Pittsburg, Pa.

Strainers.
ansroa Steam Pump Wks., A. S., New York, N. Y.

Structural Steel and Iron.

Minerican Bridge Co. of New York, New York, N. Y.

Additioner Bridge Co., Baltimore, Md.

Mittett-Hayward Go., The, Baltimore, Md.

Minerican Bridge Co., Baltimore, Md.

Minerican Steel Co., Pittaburg, Pa.

Minerican Steel Co., Pittaburg, Pa.

Minerican Bridge & Iron Whs., Chicago, Ill.

Michanal Iron Works, Baltimore, Md.

Mines Bridge & Iron Co., Des Moines, Is.

Minerican London, Ch. C., Baltimore, Md.

Mass & Laughlin Steel Co., Pittaburg, Pa.

Minerican London, Paridge & Iron Co., Leavenworth,

Kans.

Miner Relage Co., Constant V.

Stump Pullers. mmerman Steel Co., M. R., Lone Tree, la.

Sugar-Mill Machinery. ratt Engineering & Mach. Co., Atlanta, Ga.

Sulphur. Union Sulphur Co., New York, N. Y.

Super-Heaters. (Steam.)
Babcock & Wilcox Co., New York, N. Y.
Power Specialty Co., New York, N. Y.

Surveying Instruments. Keuffel & Esser, Hoboken, N. J.

Switchhoards, Switches, etc. Doubleday-Hill Electric Co., Pittsburg, Pa., Engberg's Elect. & Mech. Works, St. Joseph, Mo. Fort Wayne Electric Works, Atlanta, Ga., General Electric Co., Sciencetady, N. Y., Westinghouse Electric & Mfg. Co., Pittsburg, Pa.

Switches. [See Railroad Frogs and Switches.]

Switchstands.

American Valve & Meter Co., Cincinnati, O. Weir Frog Co., Cincinnati, O.

Tackle Blocks. (For Wire or Manila Rope.) Parterson Co., W. W., Pittsburg, Pa.

Tags. Jennison Mfg. Co., Boston, Mass.

Tanks. (Iron and Steel.)

Tanks. (Iron and Steel.)

American Water Softener Co., Philadelphia, Pa.
Bartlett-Hayward Co., The, Baltimore, Md.
Caldwell Co., Inc., W. E., Louisville, Ky.
Case Threshing Meb. Co., J. I., Bache, Wis.
Case Threshing Meb. Co., Chat'n'ga, Tenn.
Chattanooga Boller & Tank Co., Chat'n'ga, Tenn.
Chattanooga Boller & Tank Co., Chat'n'ga, Tenn.
Chattanooga Boller & Tank Co., Chat'n'ga, Tenn.
Chattanooga Boller & Iron Co., bes Moines, Ia.
Harry Bros. Co., Pallas, Tex.
Harriley Boller Works, Montgomery, Ala.
Keeler Co., E., Williamsport, Pa.,
Keeler Co., E., Williamsport, Pa.,
Kennicatt Co., Chicago Heights, III.
Lombard Iron Works, Augusta, Ga.
Lookout Boller & Mfg. Co., Chattanooga, Tenn.
New Orleans Rfg. & Metal Wks., New Orleans, La.
Petroleum Iron Works Co., Sharon, Pa.,
Scaffe & Sons Co., Wm. B., Pittsburg, Pa.
Scaffe & Sons Co., Wm. B., Pittsburg, Pa.
Scaffe & Sons Co., Wm. B., Pittsburg, Pa.
Scaffe & Sons Co., J. S., Macon, Ga.
Sydnor Pump & Well Co., Richmond, Va.
Tennessee Metal Culvert Co., Nashville, Tenn.
Virginia Bridge & Iron Co., Roanoke, Va.

Tanks. (Wood.)

Tanks. (Wood.) nanks, (Wood.)
Baltimore Cooperage Co., Baltimore, Md.
Zaldwell Co., Inc., W. E., Louisville, Ky.
Davis & Son, G. M., Palatka, Fla.
Rydnor Pump & Well Co., Itlchmond, Va

Tapes. (Measuring.) Keuffel & Esser, Hoboken, N. J. Lufkin Rule Co., Saginaw, Mich. Starrett Co., L. S., Athol, Mass.

Telephones. (Supplies, Equipment.) Doubleday-Hill Electric Co., Pittaburg. Pa. Pledmont Electric Co., Asheville, N. C. Western Electric Co., New York, N. Y.

Telephone Cable. 'estern Electric Co., New York, N. Y.

Telephone Poles. [See Crosstles.] Western Electric Co., New York, N. Y.

Terra-cotta. Terra-cotta.
Atlanta Terra-Cotta Co., East Point, Ga.
Birely, Chas. & R. O., Atlanta, Ga.
Maryland Terra-Cotta Co., Baltimore, Md.
Pomona Terra-Cotta Co., Pomona, N. C.
Southern Building Material Co., Norfolk, Va.
Stevens' Sons Co., II., Macon, Ga.

Threshers. Cardwell Machine Co., Richmond, Va. Case Threshing Mch. Co., J. I., Bacine, Wis.

Tie Plates. (Railways.) irginia Railway Supply Co., Norfolk, Va.

Tile. (Drain, Floor, etc.) Amer. Enam. Brick & Tile Co., New York, N. Y. Oconee Brick & Tile Co., Milledgeville, Ga.

Tile. (Mosaic.) Dagostin & Angelini Bros., Montgomery, Ala. Southern Mosaic Tile Co., Birmingham, Ala.

Tin and Terne Plates. American Sheet & Tin Plate Co., Pittsburg, Pa. Merchant & Evans Co., Philadelphia, Pa.

Tobacco Machinery. Buckeye Iron & Brass Works, Dayton, O. Cardwell Machine Co., Richmond, Va.

Tool Steels. Jessop's Sons Steel Sales Co., Wm., St. Louis, Mo.

Tools. (Machinists'.) Manning, Maxwell & Moore, Inc., New York, N. Y. Morse Twist Drill & Mch. Co., New Bedford, Mass.

Tools. (Mechanical.) Starrett Co., L. S., Athol, Mass.

Tools. (Pneumatie.)
American Compressor & Pump Co., Baltimore, Md.
Chicago Pneumatic Tool Co., Chicago, Ill.
Independent Pneumatic Tool Co., Chicago, Ill.
Ingernoll-Rand Co., New York, N. Y.

Torches. Wall Mfg. Supply Co., P., Allegheay, Pa.

Towers. (Steel and Wood.)

Baltimore Cooperage Co., Baltimore, Md.
Caldwell & Co., Inc., Wm. E., Louisville, Ky.
Chattanoga Boiler & Tank Co., Chat'n'ga, Tens.
Chicago Bridge & Iron Wks., Chicago, Ill.
Cole Mfg. Co., R. D., Newnan, Ga.
Des Moines Bridge & Iron Co., Des Moines, Is.

Traction Engines. Case Threshing Mach. Co., J. 1., Bacine, Wis.

Tramway. (Overhead.) Northern Engineering Works, Detroit, Mich. Speidel, J. G., Beading, Pa.

Tramway. (Wire Rope.)
Broderick & Bascom Rope Co., St. Louis. Mo.
Caldwell & Sons Co., H. W., Chicago, Ill.
Link-Belt Co., Nicetown (Philadelphis), Pa.

cker-Wheeler Co., Ampere, N. J. loney Electric Co., St. Louis, Mo.

Trench Excavator. American Steel Dredge Co., Ft. Wayne, Ind. Fairbanka Steam Shovel Co., Marion, O. Monighan Machine Co., Chicago, Ill.

Monighan Machine Co., Chicago, III.
Trucks. (Motor.)
Kelly Motor Truck Co., Springfield, O.
Trucks. (Platform, Freight, Mill, Factory, etc.)
Clark Co., Geo. P., Windsor Locks. Conn.
Howe Scale Co., New York, N. X.
Rome Scale & Mfg. Co., Rome, Ga.

Trucks. (Storage Battery Auto.)

Trucks. (Wood and Steel for Portable Ma chinery.) Electric Wheel Co., Quincy, Ill.

Trust Companies. [See Bankers and Brokers.] Tube Well Strainers. ok Well Co., St. Louis, Mo.

Tubes. (Boiler.) Tubes. (Boiler.)
Allegheny Steel Co., Pittaburg, Pa.
Cincinnati Iron & Steel Co., Cincinnati, O.
National Tube Co., Pittaburg, Pa.

National Tube Co., r., Tubing.

Tubing.
Field & Co., Inc., Philadelphia, Pa.
La Belle Iron Works, Steubenville, O.
National Tube Co., Pittsburg. Pa.
Youngatown Sheet & Tube Co., The, Youngatown, O.

Turbines. (Hydraulic.)
Allis-Chalmers Co., Milwaukee, Wis.
Daylo Foundry & Machine Works, Rome, Ga.
Dayton Globe Iron Works Co., Dayton, O.
Leffel & Co., James, Springfield, O.
Poole Engineering & Mach. Co., Baltimore, Md.
Smith Co., & Morgan, York, Pa.
Trump Mfg. Co., Springfield, O.

(Steam.)

Turbines. (Steam.)
Allis-Chalmers Co., Milwaukee, Wis.
De Laval Steam Turbine Co., Trenton, N. J.
Emerson Steam Pump Co., Alexandria, Va.
Pt. Wayne Electric Works, Pt. Wayne, Ind.
General Electric Co., Schenectady, N. Y.
Southwark Fdry, & Mch. Co., Philadelphia, Pa.
Terry Steam Turbine Co., New York, N. Y.
Wagner Electric Mfg. Co., St. Lonis, Mo.
Westinghouse Machine Co., Pittsburg, Pa.

Turbine Condensers.

Turntables. Baltimore Bridge Co., Baltimore, Md. Virginia Bridge & Iron Co., Roanoke, Va.

Turpentine. tlantic Turpentine & Refin'g Co., Savannah, Ga.

Twine. American Manufacturing Co., New York, N. Y. Columbian Rope Co., Auburn, N. Y. Plymouth Cordage Co., North Plymouth, Mass. Turner Co., J. Spencer, New York, N. Y. Whitlock Cordage Co., New York, N. Y.

Twine Machinery.
nskell-Dawes Machine Co., Boston, Mass.

Twisting Machinery. Haskell-Dawes Machine Co., Boston, Mass.

Unions.
Dart Manufacturing Co., E. M., Providence, B. 1. Vacuum Cleaning Apparatus. Blaisdell Machinery Co., Bradford, Pa.

Valves. Valves.

Rourbon Copper & Brass Wks. Co., Cincinnati, O. Columbian Iron Works, Chattanooga, Tean.

Frick Co., The., Waynesboro, Fa., Providence, R. I. Generate Physics of the Community Co., Lynchburg, Va. Jenkins Bros., New York, N. Y. National Tube Co., Pittsburg, Pa. Powell Co., Win., Clickmati, O. Wolf & Co., Fred W., Clickgo, Ill.

York Mfg. Co., York, Pa.

Varnish. Berry Bros., Ltd., Detroit, Mich.

Veneer Machines. itus, E. E., Petersburg, Va.

Ventilating Apparatus. (Engineers' and Con-tractors'.) tractors'.)

American Blower Co., Detroit, Mich.
Blaisdell Machinery Co., Bradford, Ps.
Buffalo Forge Co., Buffalo, N. Y.
Clark Co., Geo. P., Windsor Locks, Conn.
Garden City Fan Co., Chicago, Ill.
Peck-Hammond Co., Chicansati, O.
Sturtevant Co., B. F., Hyde Park, Msss.

Ventilators.

Merchant & Evans Co., Philadelphia, Pa.

Wagons. (Dump.)
Bagle Wagon Works. Aubura, N. Y.
Troy Wagon Works Co., Troy, O.

Wail Plugs. (Galvanised.) Niagara Falis Metal Stamping Works, Niagara Falis, N. Y. Wicks & Co., Milton O., Glen Cove, N. Y.

Wall Ties. Niagara Falls Metal Stamping Works, Niagara Falls, N. Y. Page Woven Wire Fence Co., Adrain, Mich.

Washers. (Ore and Phosphate.) Bailey-Lebby Co., Charleston, S. C. Cameron & Barkley Co., Charleston, S. C. McLanahan-Stone Mach. Co., Hollidaysburg, Pa.

Washers and Rivets [See Bolts, Nuts, Rivets, Stude and Washers | Water Filters. [See Filters, Water, for Domes-tic and Industrial Purposes.]

Waterfront Structures. (Concrete.)
aymond Concrete Pile Co., New York, N. Y.

Water Meters. merican Valve & Meter Co., Cincinnati, O.

Waterproofing. (For Brick Work.)
Barrett Mfg. Co., Philadelphia, Pa.
Carolina Portland Cement Co., Charleston, S. C.
National Boofing Co., Tonawanda, N. Y.

Waterproofing. (For Concrete.)
Barrett Mfg. Co., Philadelphia, Pa.
National Boofing Co., Tonawanda, N. T.

Waterproof Compound. (Liquid.) Carolina Portland Cement Co., Charleston, S. C. National Roofing Co., Tonawanda, N. Y.

Water-Softening Apparatus. (Purifying.) water-Softening Apparatus, trutiving.)
American Water Softener Co., Fulladelphia, Pa.
Dodge Manufacturing Co., Mishawaka, Ind.
Fennicott Co., Chicago Heights, Ill.
N. Y. Cont. Jewell Filtration Co., New York, N. Y.
Roberts Filter Mfg. Co., Fhiladelphia, Pa.
Scaffe & Sons Co., Wm. B., Pittsburg, Pa.
Tucker & Laxton, Charlotte, N. C.

Water Supply Systems. (Town, Home, Rail-

Water-Wheels, [See Turbines. (Hydraulic.)].

Water-Wheels. [See Turbines. (Hydraulic.)].
Water-Works Supplies and Appliances.
American Cast Iron Pipe Co., Birmingham, Als.
American Pipe & Constr. Co., Philadelphia, Pa.,
Bourbon Copper & Brass Wks. Co., Cincinnati, O.
Coldwell-Wilcox Co., Newburgh, N. Y.
Columbian Iron Works, Chattanoga, Tean.
Glamorgan Pipe & Foundry Co., Lynchburg, Vs.
Keystone Punp & Well Eng. Co., Beaver Falls, Pa.
Leadite Co., The, Philadelphia, Pa.
McWane Pipe Works, Lynchburg, Vs.
Pomona Terra-Cotta Co., Pomona, N. O.
Stevens' Sons Co., II., Macon, Ga.
U. S. Cast Iron Pipe & Fdry, Co., New York, N. Y.

Weigher. (Recording Liquid.) Worthington, Henry R., New York, N. Y.

Well Contractors. (Oil, Artesian, etc.)
Cook Well Co., The, St. Louis, Mo.
Harper, Henry W., Danielsville, Ps.
Hughes Specialty Well Drill. Co., Charleston, S. C.
Sydnor Pump & Well Co., Richmond, Va.

Well Tools and Supplies. Cook Well Co., The, St. Louis, Mo. Keystone Pump & Well Eng. Co., Beaver Falls, Pa. Williams Bros., Ithaca, N. Y.

Wheels and Axles. Electric Wheel Co., Quincy, III. Oliver Mfg. Co., W. J., Knoxville, Tenn.

Wheelbarrows and Trucks.
rracuse Chilled Plow Co., Syracuse, N. Y.

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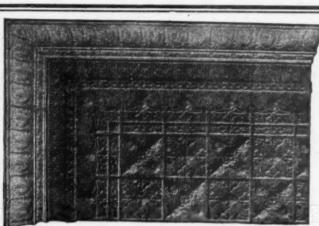
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